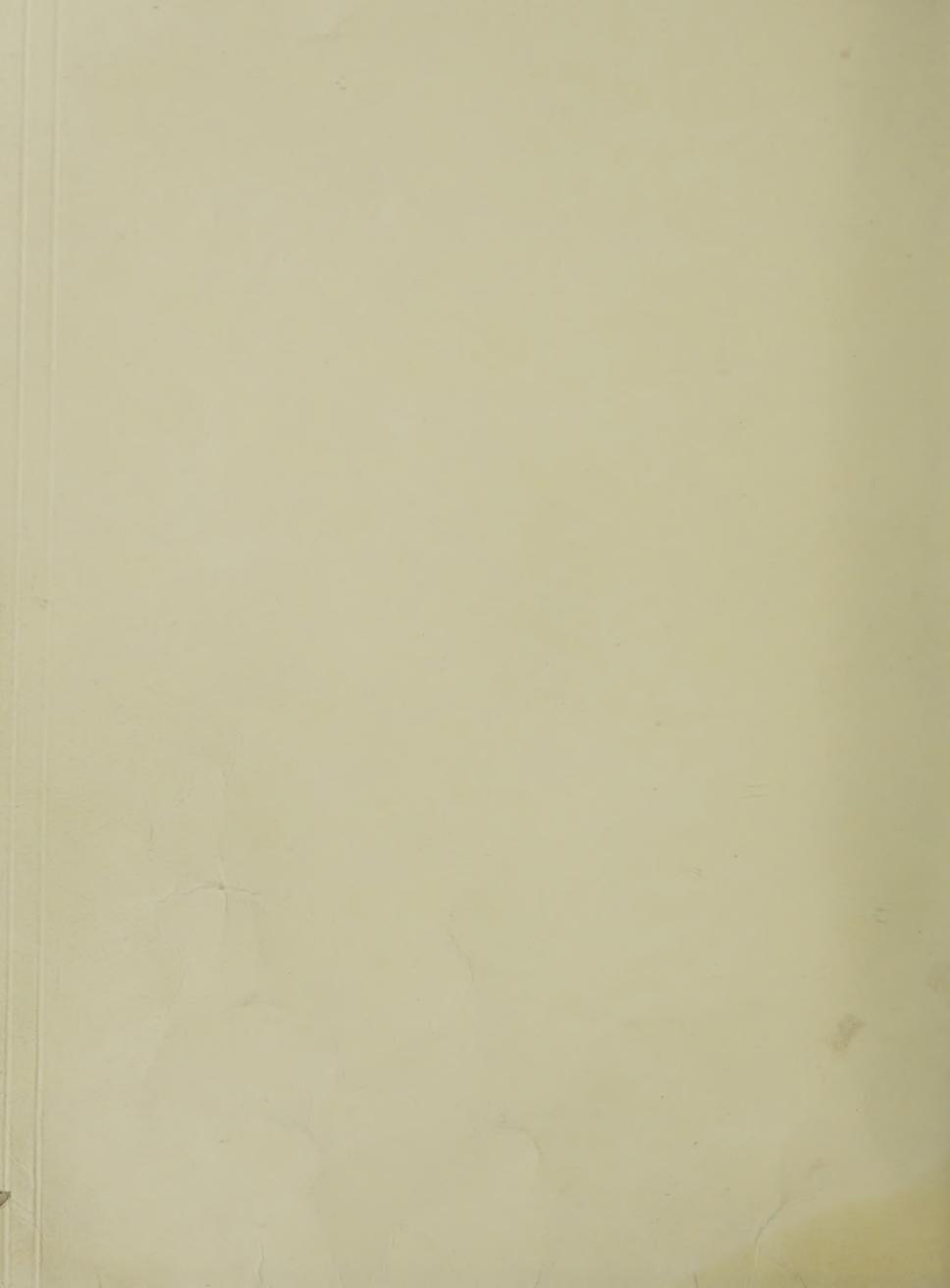
Historic, archived document

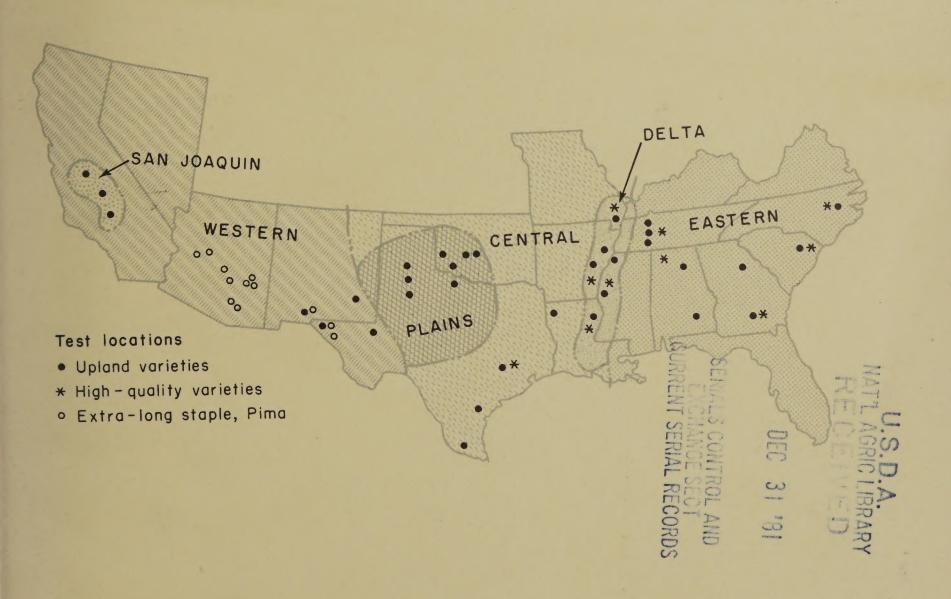
Do not assume content reflects current scientific knowledge, policies, or practices.



15B245 1843

Regional Cotton Variety Tests, 1979

Yield, Boll, Seed, and Spinning Data



Science and Education Administration U.S. Department of Agriculture



REGIONAL COTTON VARIETY TESTS, 1979

Yield, Boll, Seed, and Spinning Data

Compiled by H. H. Ramey, Jr. research geneticist, N. J. Acres, statistical assistant, and M. K. Barringer, physical science technician, Cotton Quality Laboratory, Science and Education Administration, in cooperation with the agricultural experiment stations of Alabama, Arizona, Arkansas, California, Georgia, Louisiana, Mississippi, Missouri, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, and Texas

The Regional Cotton Variety Test series is available free of charge from the Cotton Quality Laboratory, Southern Regional Research Center, P.O. Box 19687, New Orleans, La. 70179. Reports for test years 1968-73 and 1975-78 are available. This report contains yield, boll, seed, and spinning data. Fiber data are not available at this time.

Regional Cotton Variety Tests, 1979. Yield, Boll, Seed, and Spinning Data. Issued July 1981.

Published by Agricultural Research (Southern Region), Science and Education Administration, U.S. Department of Agriculture, P.O. Box 53326, New Orleans, La. 70153.

CONTENTS

Introduction 1

Regional Tests and Participating Stations 1

TEST RESULTS 3

Eastern regional cotton variety test 6
Delta regional cotton variety test 27
Central regional cotton variety test 41
Plains regional cotton variety test 51
Western regional cotton variety test 75
San Joaquin Valley continuous cotton variety test 83
High-quality regional cotton variety test 88
Pima regional cotton variety test 108
Combed-yarn test 140

Acknowledgments 143

Joint Cotton Breeding Policy Committee 144

National Cotton Variety Testing Committee 144

LOCATION INDEX

Altus, Okla., 2, 53, 54, 57, 58, 61, 62 Ames Plantation, Tenn., 1, 8, 9, 17, 18 Artesia, N. Mex., 2, 76 Athens, Ga., 1, 8, 9, 23, 24 Auburn, Ala., 1, 8, 9, 25, 26 Belle Mina, Ala., 3, 90, 91, 93, 101, 102 Bossier City, La., 2, 42, 43, 44 Chickasha, Okla., 2, 53, 54, 57, 58, 67, 68, 73, 74 Chillicothe, Tex., 2, 53, 54, 57, 58, 69, 70 Clarkedale, Ark., 2, 29, 37, 38 College Station, Tex., 2, 3, 42, 43, 45, 46, 90, 92, 96 Coolidge, Ariz., 3, 110, 111, 112, 113, 128, 129 Crossville, Ala., 1, 8, 9, 10, 11 El Paso, Tex., 2, 3, 76, 77, 78, 110, 111, 114, 115, 132, 133, 142 Fabens, Tex., 3, 110, 111, 114, 115, 138, 139 Five Points, Calif. See West Side Field Station, Calif. Florence, S.C., 1, 3, 8, 9, 14, 15, 90, 91, 93, 103, 104 Grand Junction, Tenn. See Ames

Plantation, Tenn. Halfway, Tex., 2, 53, 54, 55, 56, 71, 72 Jackson, Tenn., 1, 3, 8, 9, 12, 13, 90, 91, 92, 99, 100 Lamesa, Tex., 2, 53, 54, 55, 56, 59, 60, 77 Las Cruces, N. Mex., 2, 3, 76, 77, 79, 80, 110, 111, 114, 115, 136, 137 Lubbock, Tex., 2, 53, 54, 55, 56, 63, Madera, Calif., 2, 84, 87 Mangum, Okla., 2, 13, 53, 54, 57, 58, 65, 66 Marana, Ariz., 3, 110, 111, 112, 113, 118, 119, 122, 123 Marianna, Ark., 2, 29, 35, 36 Maricopa, Calif., 2, 84, 85 Milan, Tenn., 1, 8, 9, 19, 20 Nueces County, Tex., 2, 42, 43, 49, 50 Pecos, Tex., 2, 76, 77, 81, 82 Phoenix, Ariz., 3, 110, 111, 112, 113, 116, 117, 140 Portageville, Mo., 2, 3, 29, 34, 90, 92, 98 Rocky Mount, N.C., 1, 3, 8, 9, 21, 22, 90, 93, 107

LOCATION INDEX--Continued

Rohwer, Ark., 3, 90, 92, 97
Safford, Ariz., 3, 110, 111, 114, 115, 126, 127, 130, 131, 134, 135, 141
St. Joseph, La., 2, 3, 29, 30, 31, 90, 91, 92, 94, 95
Salome, Ariz., 3, 110, 111, 112, 113, 124, 125
Stoneville, Miss., 2, 3, 29, 32, 33,

90, 92, 105
Tifton, Ga., 1, 3, 8, 16, 90, 93, 106
Tunica, Miss., 2, 29, 39, 40
Wenden, Ariz., 3, 110, 111, 112, 113, 120, 121
Weslaco, Tex., 2, 42, 43, 47, 48
West Side Field Station, Calif., 2, 84, 86

INTRODUCTION

The National Cotton Variety Testing Program, developed from recommendations of the Joint Cotton Breeding Policy Committee, is a system for uniform reporting of data from cotton-yield trials across the U.S. Cotton Belt. The trials are conducted annually at selected locations involved in the variety-testing programs of the cooperating State agricultural experiment stations. The National Cotton Variety Testing Committee is responsible for coordinating program plans from year to year.

National standard varieties are chosen for a 3-year cycle of testing. (For the seventh 3-year cycle, beginning in 1978, the national standards were Acala SJ-5, Coker 310, Paymaster 303, and Stoneville 213.) Within each region, cooperators annually select a group of regional standard varieties that are common to all tests within the region for the particular year. Each station may add entries of local interest, but only data on the national and regional standards are included in this report. All varieties are grown to obtain experimental data, and the designation of national or regional standards is not an endorsement of the varieties by the U.S. Department of Agriculture or the cooperating State agricultural experiment stations.

Plot size, cultural practices, number of entries, and sampling methods are left to the discretion of the participating stations. While the details are not rigidly standardized, all tests are conducted by experienced personnel using sound experimental designs and procedures.

Yield, boll size, lint percentage, and seed index were supplied by the cooperating stations. Fiber and seed samples were sent to USDA's Cotton Quality Laboratory (then located in Knoxville, Tenn.), where fiber and yarn tests were made. (Fiber data for the 1979 samples are not yet available and do not appear in this report.) Seed determinations were made at the Southern Regional Research Center. The chemical analyses of seed were done by a private laboratory. Yield, boll size. and seed index were not received from certain locations. Fiber samples were not received from one location, and the fiber samples from another were too small to obtain all data. Seed samples were not obtained from several locations, and seed samples from some locations were too small for all determinations. All data were assembled in the Cotton Quality Laboratory. The yield, boll, and spinning data were analyzed at the University of Tennessee computer center, and the seed data, at the University of Florida computer cen-

In 1979 the National Cotton Variety Testing Program was organized as shown on the cover map. Upland varieties were grown in all six regions. Strains developed in the Southern States with superior fiber properties and spinning performance were tested in three contiguous regions (high-quality test). Extra-long-staple American Pima varieties were tested in the Western Region.

REGIONAL TESTS AND PARTICIPATING STATIONS

Eastern Regional Cotton Variety Test (Upland Varieties)

Alabama Agricultural Experiment Station
Sand Mountain Substation
Georgia Coastal Plain Experiment Station
Georgia College Experiment Station
Pee Dee Experiment Station
Upper Coastal Plain Experiment Station
West Tennessee Agricultural Experiment Station
Ames Plantation
Milan Field Station

Auburn, Ala.
Crossville, Ala.
Tifton, Ga.
Athens, Ga.
Florence, S.C.
Rocky Mount, N.C.
Jackson, Tenn.
Grand Junction, Tenn.
Milan, Tenn.

Delta Regional Cotton Variety Test (Upland Varieties)

Arkansas Agricultural Experiment Station:

Cotton Branch

Delta Substation

Marianna, Ark. Clarkedale, Ark.

Mississippi Agricultural and Forestry Experiment

Station:

Delta Branch Off-station test

Missouri Agricultural Experiment Station,

Delta Center

Northeast Louisiana Experiment Station

Stoneville, Miss.

Tunica, Miss.

Portageville, Mo. St. Joseph, La.

Central Regional Cotton Variety Test (Upland Varieties)

Red River Valley Experiment Station

Texas A&M University:

Agricultural Research and Extension Center

Agricultural Research Station, off-station test

Texas Agricultural Experiment Station

Bossier City, La.

Weslaco, Tex.

Nueces County, Tex. College Station, Tex.

Plains Regional Cotton Variety Test (Upland Varieties)

Oklahoma Agricultural Experiment Station:

Cotton Research Station:

Dryland test Irrigated test

Irrigation Experiment Station
Sandy Land Research Station

Texas A&M University:

Agricultural Research and Extension Center

(Chillicothe): Irrigated test

Agricultural Research and Extension Center

(Lubbock):

Irrigated test
Off-station tests

Chickasha, Okla. Chickasha, Okla. Altus, Okla. Mangum, Okla.

Chillicothe, Tex.

Lubbock, Tex. Halfway, Tex.

Lamesa, Tex.

Western Regional Cotton Variety Test (Upland Varieties)

New Mexico Agricultural Experiment Station

Southeastern Branch Station

Texas A&M University:

Agricultural Research Center Agricultural Research Station Las Cruces, N. Mex. Artesia, N. Mex.

El Paso, Tex.

Pecos, Tex.

San Joaquin Valley Continuous Cotton Variety Test (Upland Varieties)

California Agriculural Experiment Station:

West Side Field Station Off-station tests

Five Points, Calif. Madera, Calif. Maricopa, Calif.

High-Quality Regional Cotton Variety Test

Alabama Agricultural Experiment Station,

Tennessee Valley Substation

Arkansas Agricultural Experiment Station,

Southeast Branch

Georgia Coastal Plain Experiment Station

Mississippi Agricultural and Forestry Experiment

Station, Delta Branch

Missouri Agricultural Experiment Station,

Delta Center

Northeast Louisiana Experiment Station

Pee Dee Experiment Station

Texas Agricultural Experiment Station

Upper Coastal Plain Experiment Station

West Tennessee Agricultural Experiment Station

Belle Mina, Ala.

Rohwer, Ark.

Tifton, Ga.

Stoneville, Miss.

Portageville, Mo.

St. Joseph, La.

Florence, S.C.

College Station, Tex.

Rocky Mount, N.C.

Jackson, Tenn.

Pima Regional Cotton Variety Test

Arizona Agricultural Experiment Station:

Cotton Research Center

Off-station tests:

Marana Experimental Farm

Off-station test, Clark farm

Safford Branch Station

Off-station tests:

Curtis farm

Layton farm

New Mexico Agricultural Experiment Station

Texas A&M University:

Agricultural Research Center Off-station test, Maros farm Phoenix, Ariz.

Coolidge, Ariz.

Salome, Ariz.

Wenden, Ariz.

Marana, Ariz.

Marana, Ariz.

Safford, Ariz.

Safford, Ariz.

Safford, Ariz.

Las Cruces, N. Mex.

El Paso, Tex.

Fabens, Tex.

Combed-Yarn Test (American Pima Varieties)

American Pima cottons are commonly spun into combed yarns. In addition to the data taken at Knoxville, Tenn., combed-yarn tests of Pima cotton grown at three locations conducting the Pima Regional Cotton Variety Test were made by the Agricultural Marketing Service, U.S. Department of Agriculture, at its Clemson, S.C., laboratory. Classer's grade and staple, yarn tenacity of 11.8- and 7.4-tex (50's and 80's cotton count) yarns, appearance index, imperfections per 1,000 yards, and waste percentages are reported.

TEST RESULTS

No interpretation of the test results other than the indication of the significant differences among means based on an analysis of variance is presented. Means followed by the same letter or letters cannot be considered significantly different at the 0.05 level of probability, as determined by Duncan's multiple-range

test. A randomized-block design was used for all analyses, although some tests were planted in lattice designs.

The yield reported for each variety is the average derived from the number of replications used. From three to eight replications were planted, depending on the station, and six replications were

more commonly used. Boll size, lint percentage, and seed, fiber, and yarn data are based on two replications of each variety at all locations.

The tables for each regional test are arranged as follows: In the first four tables, average data for the entire region are given by cotton variety and location; the entries in these tables are arranged in order of decreasing lint yield. (For some tests, subregional summaries are also included.) Following these tables, average data for each location in the region are given, each table being arranged by variety in decreasing order of lint yield.

The column headings and symbols are defined as follows:

Acid-delinted-seed index. The mass of 100 acid-delinted seeds, in grams.

Boll size. The mass, in grams, per boll of seed cotton.

Classer's designation. A description of the quality of cotton in terms of grade and staple according to the official cotton standards of the United States. For grade, classification is based on appearance and is accomplished chiefly through the sense of sight by integration of the three factors of grade--color, leaf, and preparation--in the sample. Classification for staple length involves both sight and touch and is made by pulling out and comparing a typical portion of fiber from a sample with the official staple types.

Colorimeter. These measurements were determined by the Nickerson-Hunter colorimeter (Spinlab model). Hunter's b value is a measure of increasing yellowness of the cotton. R_d is the percentage of the reflectance; the higher the value, the lighter the cotton.

Floaters. The number of acid-delinted seeds that float in water, expressed as a percentage of the number of seeds in the sample. Seeds that float in water are considered immature, and a higher percentage indicates more immaturity.

Free gossypol. The gossypol in fuzzy seeds as determined by AOCS Method Ba 7-58; expressed as a percentage of the mass of the kernel.

<u>Linters</u>. The mass of linters removed in the acid-delinting process, expressed as a percentage of the mass of the fuzzy seeds.

<u>Lint percent</u>. The mass of lint ginned from a sample of seed cotton, expressed as a percentage of the mass of seed cotton.

Lint yield. The mean production of the plots harvested, expressed in pounds of lint per acre.

Micronaire. The fineness of the sample taken from the ginned lint, measured by the Micronaire and expressed in standard (curvilinear scale) micronaire units.

Nitrogen. The nitrogen in fuzzy seeds as determined by AOCS Method Ba 4-38; expressed as a percentage of the mass of the fuzzy seeds. The percentage of nitrogen multiplied by 6.25 is an approximation of the percentage of protein.

Oil. The oil in fuzzy seeds as determined by AOCS Method Aa 4-38; expressed as a percentage of the mass of the fuzzy seeds.

<u>Seed density</u>. The mass per volume of a seed, expressed in grams per cubic centimetre; the specific gravity.

<u>Seed grade</u>. A visual estimate of the amount of linters on seeds. Seeds are graded from 1 to 16; 1=most dense coating, and 16=no linters (completely naked).

Seed index. The mass of 100 seeds, in grams.

Seed surface area. The surface area of a seed in square millimetres; estimated by assuming that a seed is a cone on a hemispherical base and that the ratio of the diameter to the length is 1:1.755.

<u>Seed volume</u>. The volume of a seed in cubic millimetres.

Span length. Fiber length measured on the Digital Fibrograph. The distance spanned by a specified percentage of the fibers in the test specimen, where the initial starting point of the scanning in the test is considered 100 percent. The 2.5-percent span length is the length, in inches, on the test specimen spanned by 2.5 per-

cent of the fibers scanned at the initial starting point. The 2.5-percent span length approximates classer's staple. The 50-percent span length is the length, in inches, on the test specimen spanned by 50 percent of the fibers scanned at the initial starting point.

Tex. The linear density of fibers, filaments, and yarns, expressed as the mass, in milligrams, of 1 metre of fiber or yarn.

Waste. The difference in mass, expressed as a percentage, of the fed stock and delivered stock. Picker and card waste is the loss in mass during opening, picking, and carding. Comber waste is the loss in mass during combing.

Yarn appearance index. The relative evenness, smoothness, and freedom from foreign material of the yarn as evaluated by a visual comparison of the yarn with the standards adopted by the American Society for Testing and Materials. Higher numbers indicate more even and smooth yarns with less foreign material.

Yarn imperfections. The abrupt changes in thickness of a yarn detected by two capacitor plates, expressed as the number of such changes per 1,000 yards of yarn; may be called neps.

Yarn tenacity. The strength of the yarn, in centinewtons per tex (cN/tex).

EASTERN REGIONAL COTTON VARIETY TEST

Table 1.--Eastern test: Yield, boll, and spinning data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronair reading
M-W-: 225	71.6	5 66 hada	20.0	10.0	5 02 -1
McNair 235	716 a	5.66 bcde	39.8 a	10.9 e	5.03 cd
Stoneville 603	678 ab	5.74 bcd	38.3 c	11.3 bc	5.00 d
Stoneville 825	649 abc	5.44 de	39.1 b	11.4 b	5.27 a
Coker 310	634 abc	5.73 bcde	39.0 b	11.1 cde	4.87 ef
Deltapine 55	626 abc	5.59 bc	40.2 a	10.8 e	4.97 de
Coker 304	614 abc	5.86 bc	39.1 b	11.0 cde	4.87 ef
Coker 315	613 abc	5.76 bc	40.0 a	10.8 e	4.94 de
Stoneville 213	610 abc	5.66 bcde	37.5 d	11.2 bcd	5.18 ab
CNair 220	598 abc	5.93 b	39.0 ь	11.0 de	5.13 bc
Dixie King 3	576 bc	6.34 a	38.1 c	11.7 a	4.79 fg
Peltapine 26	564 bcd	5.70 bcd	39.9 a	10.8 e	5.06 cd
eltapine 61	550 cd	5.73 bcd	38.4 c	10.9 e	5.24 ab
aymaster 303	444 de	6.57 a	37.3 d	12.0 a	4.74 g
Ga Cot 79	407 ef	5.41 e	36.7 e	10.9 e	4.98 de
cala SJ-5	310 f	5.84 bc	37.8 cd	11.9 a	4.52 h
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
(aNaim 225	1 1/ 04	0 55 -1-1	72 0 1	0 2 1	10 0 L
CNair 235	1.14 cd	0.55 abcd	72.9 b	8.3 d	12.9 b
toneville 603	1.12 ef	•54 cd	73.6 ab	8•4 d	12.2 de
toneville 603 toneville 825	1.12 ef 1.14 cd	•54 cd •55 bcd	73.6 ab 73.3 b	8.4 d 8.4 d	12.2 de 11.9 e
toneville 603 toneville 825 oker 310	1.12 ef 1.14 cd 1.18 a	•54 cd •55 bcd •56 abc	73.6 ab 73.3 b 72.8 b	8.4 d 8.4 d 8.9 c	12.2 de 11.9 e 12.7 bc
toneville 603 toneville 825 oker 310 eltapine 55	1.12 ef 1.14 cd 1.18 a 1.15 bc	•54 cd •55 bcd •56 abc •55 bcd	73.6 ab 73.3 b 72.8 b 73.6 ab	8.4 d 8.4 d 8.9 c 9.0 abc	12.2 de 11.9 e 12.7 bc 12.2 de
toneville 603 toneville 825 oker 310 eltapine 55 oker 304	1.12 ef 1.14 cd 1.18 a 1.15 bc 1.19 a	•54 cd •55 bcd •56 abc •55 bcd •55 abcd	73.6 ab 73.3 b 72.8 b 73.6 ab 72.9 b	8.4 d 8.4 d 8.9 c 9.0 abc 8.8 c	12.2 de 11.9 e 12.7 bc 12.2 de 12.7 bc
toneville 603 toneville 825 coker 310 eltapine 55 coker 304	1.12 ef 1.14 cd 1.18 a 1.15 bc	•54 cd •55 bcd •56 abc •55 bcd	73.6 ab 73.3 b 72.8 b 73.6 ab	8.4 d 8.4 d 8.9 c 9.0 abc	12.2 de 11.9 e 12.7 bc 12.2 de
toneville 603 toneville 825 oker 310 eltapine 55 oker 304	1.12 ef 1.14 cd 1.18 a 1.15 bc 1.19 a	•54 cd •55 bcd •56 abc •55 bcd •55 abcd	73.6 ab 73.3 b 72.8 b 73.6 ab 72.9 b	8.4 d 8.4 d 8.9 c 9.0 abc 8.8 c	12.2 de 11.9 e 12.7 bc 12.2 de 12.7 bc
toneville 603 toneville 825 oker 310 eltapine 55 oker 304 oker 315 toneville 213	1.12 ef 1.14 cd 1.18 a 1.15 bc 1.19 a 1.20 a	 .54 cd .55 bcd .56 abc .55 bcd .55 abcd .57 a 	73.6 ab 73.3 b 72.8 b 73.6 ab 72.9 b 72.7 b	8.4 d 8.4 d 8.9 c 9.0 abc 8.8 c 8.9 bc	12.2 de 11.9 e 12.7 bc 12.2 de 12.7 bc 12.9 b
toneville 603 toneville 825 oker 310 eltapine 55 oker 304 oker 315 toneville 213 cNair 220	1.12 ef 1.14 cd 1.18 a 1.15 bc 1.19 a 1.20 a 1.13 de	•54 cd •55 bcd •56 abc •55 bcd •55 abcd •57 a •55 bcd	73.6 ab 73.3 b 72.8 b 73.6 ab 72.9 b 72.7 b 73.3 b	8.4 d 8.4 d 8.9 c 9.0 abc 8.8 c 8.9 bc 9.2 a	12.2 de 11.9 e 12.7 bc 12.2 de 12.7 bc 12.9 b 12.0 de
toneville 603 toneville 825 oker 310 eltapine 55 oker 304 oker 315 toneville 213 cNair 220 ixie King 3	1.12 ef 1.14 cd 1.18 a 1.15 bc 1.19 a 1.20 a 1.13 de 1.13 de	•54 cd •55 bcd •56 abc •55 bcd •55 abcd •57 a •55 bcd •55 abcd	73.6 ab 73.3 b 72.8 b 73.6 ab 72.9 b 72.7 b 73.3 b 72.9 b	8.4 d 8.4 d 8.9 c 9.0 abc 8.8 c 8.9 bc 9.2 a 8.5 d	12.2 de 11.9 e 12.7 bc 12.2 de 12.7 bc 12.9 b 12.0 de 12.9 b
toneville 603 toneville 825 oker 310 eltapine 55 oker 304 oker 315 toneville 213 cNair 220 ixie King 3 eltapine 26	1.12 ef 1.14 cd 1.18 a 1.15 bc 1.19 a 1.20 a 1.13 de 1.13 de 1.11 f 1.14 cd	•54 cd •55 bcd •56 abc •55 bcd •55 abcd •57 a •55 bcd •55 abcd •54 d •56 abc	73.6 ab 73.3 b 72.8 b 73.6 ab 72.9 b 72.7 b 73.3 b 72.9 b 73.0 b 73.6 ab	8.4 d 8.4 d 8.9 c 9.0 abc 8.8 c 8.9 bc 9.2 a 8.5 d 8.7 c 8.9 c	12.2 de 11.9 e 12.7 bc 12.2 de 12.7 bc 12.9 b 12.0 de 12.9 b 12.4 cd 12.1 de
toneville 603 toneville 825 oker 310 eltapine 55 oker 304 toneville 213 cNair 220 dixie King 3 eltapine 26 eltapine 61	1.12 ef 1.14 cd 1.18 a 1.15 bc 1.19 a 1.20 a 1.13 de 1.13 de 1.11 f 1.14 cd 1.15 bc	.54 cd .55 bcd .56 abc .55 bcd .55 abcd .57 a .55 bcd .55 abcd .54 d .56 abc	73.6 ab 73.3 b 72.8 b 73.6 ab 72.9 b 72.7 b 73.3 b 72.9 b 73.0 b 73.6 ab 74.2 a	8.4 d 8.4 d 8.9 c 9.0 abc 8.8 c 8.9 bc 9.2 a 8.5 d 8.7 c 8.9 c 8.8 c	12.2 de 11.9 e 12.7 bc 12.2 de 12.7 bc 12.9 b 12.0 de 12.9 b 12.4 cd 12.1 de 12.1 de
conair 235	1.12 ef 1.14 cd 1.18 a 1.15 bc 1.19 a 1.20 a 1.13 de 1.13 de 1.11 f 1.14 cd	•54 cd •55 bcd •56 abc •55 bcd •55 abcd •57 a •55 bcd •55 abcd •54 d •56 abc	73.6 ab 73.3 b 72.8 b 73.6 ab 72.9 b 72.7 b 73.3 b 72.9 b 73.0 b 73.6 ab	8.4 d 8.4 d 8.9 c 9.0 abc 8.8 c 8.9 bc 9.2 a 8.5 d 8.7 c 8.9 c	12.2 de 11.9 e 12.7 bc 12.2 de 12.7 bc 12.9 b 12.0 de 12.9 b 12.4 cd 12.1 de

Table 2.--Eastern test: Seed data by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 235	20.9 ab 20.3 cde 19.6 fg 20.2 cde 19.4 g 20.6 bc 20.2 cde 19.5 g 20.9 ab 20.3 cd 18.5 h 19.9 ef 21.0 a	3.30 de 3.25 efg 3.29 ef 3.38 bc 3.36 cd 3.43 b 3.40 bc 3.24 fg 3.36 cd 3.25 efg 3.27 efg 3.17 h 3.43 b	1.07 bcde 1.08 bcd 1.19 a 1.09 bc 1.12 b 1.08 bcd 1.11 b 1.20 a 1.07 bcde 1.13 b 1.03 cde 1.03 de 1.02 e	8.5 e 10.8 bcd 12.3 ab 9.7 cde 10.4 cd 10.2 cde 10.9 bcd 12.8 a 9.1 de 10.4 cd 9.2 de 10.2 cde	4.6 a 4.1 b 3.8 b 3.9 b 4.1 b 4.0 b 3.9 b 3.9 b 4.5 a 4.0 b 4.5 a 4.6 a 4.0 b
Ga Cot 79	20.0 def 20.9 ab Seed volume (mm ³)	3.22 gh 3.51 a Seed surface area (mm ²)	1.08 bcde .86 f Seed density (g/cm ³)	10.1 cde 8.6 e Floaters (percent)	4.5 a 3.9 b Acid- delinted- seed index
McNair 235	103.3 cdef 102.8 cdef 103.8 cdef 100.6 def 95.9 g 100.1 ef 100.0 f 101.9 cdef 104.6 bcde 106.2 bc 108.5 ab 104.7 bcd 111.9 a 100.8 def 108.2 ab	115.4 cde 115.0 cde 115.8 cde 113.5 de 109.8 f 113.1 de 112.9 e 114.5 cde 116.3 bcde 117.5 bc 119.3 ab 116.4 bcd 121.7 a 113.5 de 119.1 ab	1.011 cde 1.015 cde 1.012 cde 1.024 abc 1.014 cde 1.034 a 1.017 bcd 1.001 de 1.017 bcd 1.033 ab .972 f .997 e 1.014 cde 1.011 cde 1.035 a	4.3 a 4.3 a 4.6 a 4.1 a 3.0 a 3.5 a 3.6 a 3.5 a 3.4 a 1.4 b 3.8 a 4.6 a 4.2 a 3.0 a 3.8 a	10.5 cd 10.4 cde 10.5 cd 10.3 def 9.7 g 10.3 cdef 10.1 f 10.6 c 10.9 b 10.5 cd 10.4 cde 11.3 a 10.2 ef 11.2 a

Table 3.--Eastern test: Yield, boll, and spinning data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Crossville, Ala	801 a	5.79 bc	39.6 c	12.6 a	4.57 f
Florence, S. C	774 ab	6.06 ab	40.1 b	11.0 c	5.54 a
Jackson, Tenn	761 Ъ	5.71 c	35.2 f	11.2 c	4.33 g
Tifton, Ga Ames Plantation,	696 c	5.94 bc	40.0 bc	11.5 b	4.93 c
Tenn	529 d	6.19 a	37.5 d	12.1 a	4.88 cd
Milan, Tenn	437 e	6.02 ab	36.0 e	12.3 a	4.66 e
Rocky Mount, N. C.	413 ef	5.69 c	39.9 bc	10.0 e	5.43 ъ
Athens, Ga	393 f	5.74 c	42.4 a	10.3 d	5.61 a
Auburn, Ala	351 g	4.99 d	37.3 d	NA	4.80 d
	Span length (inches)	Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Crossville, Ala	1.15 e	0.55 cd	74.5 cd	9.3 b	11.9 d
Florence, S. C	1.10 g	•52 e	75.4 ъ	8.9 c	12.0 d
Jackson, Tenn	1.17 cd	•56 abc	74.5 cd	8.8 c	12.9 b
Tifton, Ga Ames Plantation,	1.16 de	.56 abc	73.1 e	8.8 c	12.3 c
Tenn	1.18 bc	•57 ab	74.2 cd	8.2 e	13.1 b
Milan, Tenn	1.20 a	•57 a	74.8 bc	8.0 e	13.7 a
Rocky Mount, N. C.	1.12 f	•55 bcd	74.0 d	8.6 d	12.5 c
Athens, Ga	1.09 g	.51 f	62.5 f	10.0 a	11.4 e
,	1.15 e	•55 d	76.4 a	8.5 d	12.0 d

Table 4.--Eastern test: Seed data by test location

Location	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Crossville, Ala	20.4 ab	3.23 b	1.22 a	10.4 ab	5.3 a
Florence, S. C	21.1 a	3.26 b	1.15 a	NA	3.9 bc
Jackson, Tenn Ames Plantation,	19.5 c	3.25 b	1.09 a	10.5 ab	4.0 bc
Tenn	20.4 ab	3.22 b	1.12 a	9.5 Ъ	4.3 b
Milan, Tenn	20.7 a	3.20 b	1.09 a	11.3 a	3.8 c
Rocky Mount, N. C.	20.4 ab	3.58 a	1.13 a	9.5 Ъ	4.3 b
Athens, Ga	17.9 d	3.70 a	.74 c	11.3 ab	5•3 a
Auburn, Ala	19.7 bc	3.34 b	•93 b	NA	4.0 bc
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Crossville, Ala	106.3 ab	117.6 ab	1.016 b	3.2 b	10.8 ab
Florence, S. C	NA	NA	NA	NA	NA
Jackson, Tenn Ames Plantation,	103.9 ab	116.1 ab	•986 c	7.3 a	10.2 ab
Tenn	111.8 a	121.8 a	1.009 Ъ	3.5 b	11.3 a
Milan, Tenn	111 . 0 a	121•2 a	1.002 bc	2.9 b	11.1 a
Rocky Mount, N. C.	90.3 c	105.6 c	1.056 a	2.0 b	9.5 Ъ
Athens, Ga	93.5 bc	108.1 bc	1.014 b	2.0 b	9.5 Ъ
Auburn, Ala	NA	NA	NA	NA	NA

Table 5.--Eastern test: Yield, boll, and spinning data for Crossville, Ala.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Coker 304	1041 a	5.62	40.6	12.4	4.50
McNair 235	1026 a	5.67	41.1	12.2	4.60
Stoneville 603	979 ab	5.90	40.1	12.6	4.70
Coker 310	966 ab	4.98	40.3	11.5	4.60
ixie King 3	943 ab	6.59	40.5	13.2	4.60
oker 315	932 ab	5.35	41.9	12.2	4.65
eltapine 55	882 abc	5.58	41.0	11.5	4.25
eltapine 61	852 abc	5.76	39.6	12.7	4.80
aymaster 303	829 bc	6.60	37.2	13.8	4.55
toneville 825	814 bc	5.48	38.7	13.2	4.75
toneville 213	812 bc	6.34	37.8	12.7	4.65
eltapine 26	725 c	5.86	41.0	12.6	4.00
a Cot 79	477 d	5.62	36.5	11.3	4.60
cala SJ-5	383 d	5.49	39.4	13.2	4.15
1c Nair 220	358 d	5.96	39.1	13.5	5.15
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
Coker 304	1.17	0.53	73.0	9.0	11.6
	1.12				
ke Nair 235		• 53	74.1	8.6	12.5
toneville 603	1.14	• 56	76.1	8.9	12.3
oker 310	1.18	•56	75.4	9.0	12.7
ixie King 3	1.12	• 54	75.5	9.3	12.0
oker 315	1.17	•56	74.0	9.4	12.1
eltapine 55	1.15	• 54	75.3	9.6	11.9
eltapine 61	1.17	•58	75.4	9.3	11.6
aymaster 303	1.11	•51	73.2	9.5	10.6
toneville 825	1.13	•55	74.9	8.8	11.5
toneville 213	1.14	• 55	74.8	10.1	11.0
eltapine 26	1.16	•61	75.0	9.4	11.7
a Cot 79	1.17	• 56	75.0	9.5	12.2
cala SJ-5	1.18	•58	72.7	9.5	13.0

Table 6.--Eastern test: Seed data for Crossville, Ala.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Coker 304	20.9	3.32	1.28	9.6	4.0
McNair 235	21.4	3.20	1.20	8.1	5.0
Stoneville 603	20.2	3.19	1.17	9.7	4.0
Coker 310	20.7	3.19	1.34	10.7	4.0
Dixie King 3	20.9	3.12	1.34	9.6	4.0
Coker 315	20.4	3.24	1.21	10.6	4.0
Deltapine 55	19.1	3.31	1.23	8.9	4.0
Deltapine 61	20.6	3.15	1.21	9.4	4.0
Paymaster 303	22.0	3.36	1.24	9.7	4.0
Stoneville 825	20.4	3.23	1.31	11.4	4.0
Stoneville 213	19.6	3.14	1.25	13.5	4.0
Deltapine 26	18.6	3.25	1.19	9.0	4.0
Ga Cot 79	20.2	3.14	1.23	10.3	4.0
Acala SJ-5	20.3	3.27	• 93	11.1	4.0
McNair 220	20.7	3.40	1.18	10.0	4.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Coker 304	106.6	118.0	1.048	2.0	11.2
McNair 235	108.6	119.5	1.030	2.0	11.2
Stoneville 603	104.4	116.3	1.011	6.0	10.6
Coker 310	99.2	112.5	1.033	1.0	10.3
Dixie King 3	114.6	123.8	1.038	0.0	11.9
Coker 315	104.5	116.4	1.042	1.0	10.9
Deltapine 55	102.5	114.9	1.019	2.5	10.5
Deltapine 61	115.1	124.2	1.002	2.0	11.5
Paymaster 303	123.8	130.4	1.006	3.5	12.5
Stoneville 825	104.3	116.1	1.010	5.0	10.5
Stoneville 213	92.4	106.4	•979	2.8	8.5
Deltapine 26	115.1	124.2	•994	2.0	11.5
Ga Cot 79 ······	99.4	112.6	1.030	2.5	10.2
Acala SJ-5	108.5	119.3	1.011	6.8	11.1
McNair 220	117.5	125.9	1.032	1.0	12.1

Table 7.--Eastern test: Yield, boll, and spinning data for Jackson, Tenn.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
McNair 235	942 a	5.60	37.1	10.9	4.45
Stoneville 603	932 ab	5.84	34.5	11.6	4.55
Deltapine 55	897 abc	5.64	36.8	10.9	4.40
McNair 220	879 abc	6.05	36.4	10.5	4.35
Dixie King 3	844 abcd	6.46	34.4	11.4	4.10
Stoneville 825	836 abcd	5.31	34.1	11.5	4.45
eltapine 26	828 abcd	5.44	35.4	10.8	4.40
Coker 310	824 abcd	5.49	37.0	10.1	4.15
eltapine 61	790 bcd	5.44	34.1	10.5	4.20
oker 315	780 cd	5.73	37.0	10.7	4.35
toneville 213	766 cd	5.60	32.4	11.2	4.45
			35.9	10.9	4.35
Soker 304	716 de	5.42			
aymaster 303	605 ef	6.81	34.3	12.4	4.35
cala SJ-5	483 f	6.27	35.2	11.3	4.00
a Cot 79	297 g	4 • 54	32.9	11.0	4.35
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	$R_{\mathcal{d}}$	Hunter's b value	tenacity (cN/tex)
McNair 235	1.15	0.55	75.0	8.5	13.1
Stoneville 603	1.17	•57	74.0	8.8	12.1
eltapine 55	1.19	•56	74.3	9.0	12.1
Nair 220	1.14	• 54	75.3	8.6	13.8
ixie King 3	1.10	•53	73.3	8.6	12.3
toneville 825	1.17	•57	76.5	8.7	12.6
eltapine 26	1.18	•58	73.8	8.9	12.8
dicapina io vivivi	1.22	•59	74.8	8.7	13.2
Coker 310		• 3 3			
			74.5	9.1	13.0
Deltapine 61	1.21	• 59	74.5 73.1	9.1 8.7	13.4
Deltapine 61	1.21 1.21	•59 •58	73.1	8.7	13.4
coker 315 toneville 213	1.21 1.21 1.15	•59 •58 •57	73.1 75.9	8.7 9.0	13.4 13.1
eltapine 61 oker 315 toneville 213 oker 304	1.21 1.21 1.15 1.23	•59 •58 •57 •58	73.1 75.9 73.6	8.7 9.0 8.9	13.4 13.1 13.0
Coker 315	1.21 1.21 1.15 1.23 1.10	.59 .58 .57 .58	73.1 75.9 73.6 72.6	8.7 9.0 8.9 8.9	13.4 13.1 13.0 11.3
Coker 310 Deltapine 61 Coker 315 Stoneville 213 Coker 304 Paymaster 303 Acala SJ-5 Ga Cot 79	1.21 1.21 1.15 1.23	•59 •58 •57 •58	73.1 75.9 73.6	8.7 9.0 8.9	13.4 13.1 13.0

Table 8.--Eastern test: Seed data for Jackson, Tenn.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 235	20.4	3.24	1.15	9.7	5.0
Stoneville 603	20.2	3.24	•90	12.7	3.5
Deltapine 55	18.3	3.21	1.15	11.3	4.0
McNair 220	20.0	3.25	1.13	8.8	4.0
Dixie King 3	20.3	3.23	1.13	9.4	4.0
Stoneville 825	19.9	3.12	1.25	12.4	4.0
Deltapine 26	17.5	3.18	1.08	9.0	4.0
Coker 310	19.4	3.26	1.08	11.2	3.5
Deltapine 61	18.1	3.11	1.01	10.9	5.0
Coker 315	19.6	3.36	1.11	11.0	4.0
Stoneville 213	19.1	3.18	1.20	12.4	3.5
Coker 304	19.7	3.32	1.09	10.7	4.0
Paymaster 303	20.2	3.35	1.01	9.9	4.0
Acala SJ-5	21.0	3.50	• 97	7.6	3.5
Ga Cot 79	19.1	3.07	1.02	10.3	4.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
W W 1 - 025	10/ 7	116.6	0.067	0.5	10.1
McNair 235	104.7	116.6	0.967	9.5	10.1
Stoneville 603	106.9	118.2	•982	9.3	10.5
Deltapine 55	95.9	109.9	•985	6.0	9.4
McNair 220	101.4	114.1	.989	5.8	10.0
Dixie King 3	110.1	120.6	1.009	2.3	11.1
Stoneville 825	108.6	119.4	•970	5.0	10.5 9.9
Deltapine 26	104.1	116.1	.949	9.8	
Coker 310	94.4	108.8	1.001	11.0	9.4
Deltapine 61	101.8	114.4	.961	14.3	9.8
Coker 315	96.3	110.2	1.009	8.3	9.7
Stoneville 213	109.7	121.8	.979	4.8	10.7
Coker 304	100.9	113.7	.999	6.3	10.1
	116.2	125.0	•995	7.8	11.5
Paymaster 303		117 0	1 025	2 -	100
Acala SJ-5 Ga Cot 79	105.6 102.9	117.2 115.2	1.035 .965	3.5 6.5	10.9 9.9

Table 9.--Eastern test: Yield, boll, and spinning data for Florence, S. C.

ariety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Nair 235	893 a	6.13	41.0	10.9	5.55
oker 315	869 ab	6.02	41.2	10.8	5.35
oker 304	860 ab	6.73	39.9	11.2	5.15
oker 310	859 ab	6.41	40.3	11.5	5.30
eltapine 26	829 abc	5.27	42.7	10.0	6.00
toneville 825	828 abc	5.91	40.0	11.3	5.95
Nair 220	803 abc	5.99	40.6	10.9	5.50
toneville 213	802 abc	5.79	39.1	11.0	5.80
a Cot 79	786 bcd	5.90	40.0	10.4	5.55
eltapine 55	782 cde	5.62	41.8	10.6	5.50
coneville 603	750 cde	5.60	40.2	10.7	5.65
ixie King 3	700 de	6.29	38.8	12.0	5.20
eltapine 61	686 ef	5.75	41.2	9.8	6.00
aymaster 303	603 fg	7.25	37.6	11.8	5.55
cala SJ-5 ·····	554 g	6.24	38.1	12.0	5.10
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
cNair 235	1.09	0.52	75.8	8.5	11.7
oker 315	1.13	•51	75.6	8.8	12.5
oker 304	1.17	• 56	75.3	8.9	12.8
ker 310	1.17	• 54	73.7	8.9	11.7
1tapine 26	1.06	•51	75.9	9.1	11.7
oneville 825	1.09	• 52	76.6	8.3	11.5
Nair 220	1.09	• 52	75.4	8.8	12.2
coneville 213	1.09	• 53	74.5	9.4	10.9
Cot 79	1.10	• 52	76.2	9.1	11.6
eltapine 55	1.09	•52	75.0	9.5	11.8
coneville 603	1.05	•50	77.2	9.0	11.4
ixie King 3	1.08	•53	73.5	8.9	12.2
eltapine 61	1.08	•52	76.4	9.0	11.5
			73.8	9.3	
•	1.06	• 31			
aymaster 303	1.06 1.16	•51 •57	76.3	8.7	11.1 15.3

Table 10.--Eastern test: Seed data for Florence, S. C.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 235	21.7	3.20	1.15	NA	4.0
Coker 315	20.8	3.42	1.15	NA	3.5
Coker 304	21.4	3.36	1.13	NA	4.0
Coker 310	21.0	3.32	1.10	NA	3.5
Deltapine 26	19.0	3.29	1.14	NA	4.5
Stoneville 825	20.2	3.27	1.37	NA	4.0
McNair 220	22.0	3.23	1.10	NA	4.0
Stoneville 213	20.6	3.22	1.35	NA	4.0
Ga Cot 79	20.9	3.12	1.19	NA	4.0
Deltapine 55	20.3	3.31	1.13	NA	3.5
Stoneville 603	21.8	3.14	1.21	NA	3.5
Dixie King 3	20.5	3.21	1.14	NA	3.5
Deltapine 61	21.0	3.09	1.15	NA	5.0
Paymaster 303	22.5	3.33	1.15	NA	4.0
Acala SJ-5	23.4	3.41	•91	NA	4.0

Table 11.--Eastern test: Yield, boll, and spinning data for Tifton, Ga.

Variety	Lint yield	Boll size	Lint	Seed	Micronaire
	(1b/acre)	(g/boll)	percent	index	reading
Stoneville 825 · · · ·	878 a	5.59	40.4	11.9	5.40
McNair 235	873 a	5.59	40.4	11.5	4.95
McNair 220	850 ab	5.73	39.8	11.2	4.85
Coker 310	817 ab	6.02	40.4	11.3	4.75
Stoneville 603	810 ab	5.63	40.3	11.3	4.90
Deltapine 26	733 bc	5.98	42.7	11.4	5.30
Coker 315	727 bc	6.35	41.1	11.1	4.95
Deltapine 61	725 bc	6.30	39.1	11.7	5.35
Deltapine 55	721 bc	5.14	40.6	11.4	4.85
Stoneville 213	713 bc	5.57	40.2	11.6	5.30
Coker 304	668 c	6.61	40.2	11.5	4.80
Dixie King 3	667 c	6.34	39.3	12.0	4.65
Ga Cot 79	520 d	5.39	37.1	11.7	5.05
Paymaster 303	468 đ	6.95	38.5	12.3	4.40
Acala SJ-5	271 e	5.88	40.7	11.1	4.50
	Span length (inches)		Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 825	1.14	0.56	73.8	8.3	11.9
McNair 235	1.16	•55	72.6	8.4	12.4
McNair 220	1.12	• 54	72.3	8.7	12.6
Coker 310	1.19	•58	72.2	8.9.	12.6
Stoneville 603	1.14	•55	74.3	8.0	11.8
Deltapine 26	1.13	•56	74.3	8.9	11.6
Coker 315	1.22	•59	71.7	8.8	13.0
Deltapine 61	1.18	•58	74.7	8.8	11.9
Deltapine 55	1.19	•59	72.4	8.8	12.6
Stoneville 213	1.15	•57	72.5	9.3	12.0
Coker 304	1.23	•58	73.0	8.8	12.8
Dixie King 3	1.09	• 54	72.2	8.8	12.6
Ga Cot 79	1.17	•59	73.5	8.8	12.7
			73.4	9.3	11.3
Paymaster 303	1.13	• 55	/ 1 . 4	9.1	11.3

Table 12.--Eastern test: Yield, boll, and spinning data for Ames Plantation, Tenn.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
		(6/ 0011)	percent	Thuex	Tead Tig
McNair 235	775 a	6.27	39.6	11.8	4.85
Stoneville 603	715 ab	6.27	37.0	12.3	4.70
Stoneville 825	715 ab	5.55	37.8	12.6	5.15
McNair 220	658 bc	6.37	38.7	12.2	5.15
Coker 304	652 bc	6.12	38.2	11.8	4.90
Coker 315	602 cd	5.96	39.1	11.8	4.80
Deltapine 55	561 cd	6.63	39.1	11.4	5.05
Coker 310	554 cd	6.11	37.1	11.9	4.80
Dixie King 3	541 de	6.98	36.9	13.0	4.85
Stoneville 213	522 def	5.66	36.3	12.3	5.10
Deltapine 61	450 ef	6.05	37.2	12.0	5.10
Deltapine 26	438 fg	6.03	38.4	11.7	5.00
Paymaster 303	350 gh	6.98	36.6	13.3	4.60
Acala SJ-5	309 h	6.79	36.4	12.7	4.40
Ga Cot 79	96 i	5.12	34.6	11.7	4.75
Ga 001 / / *******************************		J • 12			4 • 7 3
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's	tenacity
				<i>b</i> value	(cN/tex)
McNair 235	1.19	0.59	74.2	7.6	14.8
Stoneville 603	1.16	•57	74.4	7.5	13.2
Stoneville 825	1.16	•57	75.1	7.8	12.2
McNair 220	1.17	•58	72.5	7.4	13.3
Coker 304	1.20	•57	72.3	8.8	12.7
Coker 315	1.25	•59	73.1	8.3	13.0
Deltapine 55	1.18	• 54	74.5	8.0	12.7
Coker 310	1.19	• 54	75.6	8.8	13.7
Dixie King 3	1.15	•55	72.0	7.8	13.2
	1.17	•58	74.4	8.5	12.8
			74.0	7.9	12.3
Stoneville 213		• 56			
Stoneville 213 Deltapine 61	1.18	• 56 • 60			
Stoneville 213 Deltapine 61 Deltapine 26	1.18 1.20	• 60	75.0	8.4	13.1
Stoneville 213 Deltapine 61 Deltapine 26 Paymaster 303	1.18 1.20 1.13	• 60 • 54	75.0 75.7	8.4 8.7	13.1 12.4
Stoneville 213 Deltapine 61	1.18 1.20	• 60	75.0	8.4	13.1

Table 13.--Eastern test: Seed data for Ames Plantation, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 235	21.6	3.12	1.19	5.3	5.0
Stoneville 603	20.2	3.14	1.14	10.4	4.0
Stoneville 825	19.8	3.25	1.19	10.1	4.0
McNair 220	21.9	3.20	1.14	7.7	5.0
Coker 304	20.9	3.25	1.15	9.8	4.0
Coker 315	20.4	3.27	1.21	11.1	4.0
Deltapine 55	19.5	3.29	1.19	9.7	4.0
Coker 310	20.9	3.29	1.20	9.2	4.0
Dixie King 3	20.8	3.04	1.16	11.1	4.0
Stoneville 213	20.2	3.22	1.27	12.2	4.0
Deltapine 61	19.8	3.12	•99	10.6	4.5
Deltapine 26	19.1	3.23	1.05	9.2	5.0
Paymaster 303	21.3	3.35	1.03	9.4	4.0
Acala SJ-5	21.2	3.58	• 80	7.3	4.0
Ga Cot 79	19.3	3.03	1.07	9.9	5.5
	Seed volume	Seed surface	Seed density	Floaters (percent)	Acid- delinted-
	(mm ³)	area (mm ²)	(g/cm ³)		seed index
McNair 235	115.6	124.5	0.999	3.8	11.5
Stoneville 603	109.8	120.3	1.014	3.0	11.1
Stoneville 825	110.3	120.7	1.008	5.3	11.1
McNair 220	114.8	123.9	1.006	4.0	11.5
Coker 304	107.6	118.7	1.038	4.0	11.2
Coker 315	103.3	115.5	1.020	4.3	10.5
Deltapine 55	104.4	116.4	1.014	1.8	10.6
Coker 310	109.3	119.9	1.023	3.3	11.2
Dixie King 3	113.9	123.3	1.021	1.0	11.6
Stoneville 213	111.3	121.5	• 993	5.0	11.1
Deltapine 61	111.6	121.6	• 996	3.8	11.1
<u> </u>		124.1	• 966	4.3	11.1
Deltapine 26	110.0		-		
•	115.0 123.5		1.008	3.5	12.5
Deltapine 26 Paymaster 303 Acala SJ-5	123.5 115.1	130.2 124.2	1.008 1.030	3.5 3.3	12.5 11.8

Table 14.--Eastern test: Yield, boll, and spinning data for Milan, Tenn.

ariety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 603	580 a	5.69	37.3	12.2	4.50
McNair 235	562 a	5.75	36.5	11.8	4.80
Stoneville 825	537 ab	5.66	38.6	13.0	4.95
Coker 310	535 ab	5.84	37.4	11.6	4.60
toneville 213	514 ab	6.42	34.7	12.8	5.00
eltapine 55	509 ab	5.79	36.6	11.8	4.65
cNair 220	466 abc	6.05	36.3	11.9	4.75
eltapine 26	465 abc	6.33	35.5	11.9	4.65
oker 315	455 abc	5.90	37.4	12.0	4.60
ixie King 3	427 bc	6.70	35.2	13.3	4.60
oker 304	422 bc	6.03	37.1	11.7	4.60
eltapine 61	360 cd	5.94	35.3	12.1	5.05
aymaster 303	316 d	6.59	34.5	13.0	4.50
cala SJ-5	262 de	6.31	35.7	13.2	4.20
Ga Cot 79	146 de	5.38	32.6	12.1	4.45
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 603	1.18	0.57	74 • 4	6.9	13.3
CNair 235	1.20	•57	74.8	7.9	14.4
toneville 825	1.20	•58	71.6	7.5	13.2
oker 310	1.23	•59	74.8	8.0	13.5
toneville 213	1.16	• 56	75.2	7.9	13.0
eltapine 55	1.22	•57	76.0	8.1	13.6
_	1.21	•61	74.9	7.6	14.7
c Nair 220		• • •	1702		
			75.2	7.9	13.3
eltapine 26	1.19	•58	75•2 75 3	7.9 8.4	13.8
eltapine 26 oker 315	1.19 1.26	•58 •61	75.3	8.4	13.8
eltapine 26 oker 315 ixie King 3	1.19 1.26 1.20	•58 •61 •58	75.3 76.0	8.4 8.2	13.8 14.0
eltapine 26 oker 315 ixie King 3 oker 304	1.19 1.26 1.20 1.24	.58 .61 .58 .57	75.3 76.0 75.1	8.4 8.2 8.1	13.8 14.0 13.4
eltapine 26 oker 315 ixie King 3 oker 304 eltapine 61	1.19 1.26 1.20 1.24 1.22	•58 •61 •58 •57 •59	75.3 76.0 75.1 76.3	8.4 8.2 8.1 8.2	13.8 14.0 13.4 13.7
eltapine 26 oker 315 vixie King 3 oker 304 eltapine 61 aymaster 303	1.19 1.26 1.20 1.24 1.22 1.13	.58 .61 .58 .57 .59	75.3 76.0 75.1 76.3 73.6	8.4 8.2 8.1 8.2 8.5	13.8 14.0 13.4 13.7 12.1
Coker 315 Coker 315 Coker 304 Coker 305 Coker 307 Coker 308 Coker 308 Coker 309 Coker	1.19 1.26 1.20 1.24 1.22	•58 •61 •58 •57 •59	75.3 76.0 75.1 76.3	8.4 8.2 8.1 8.2	13.8 14.0 13.4 13.7

Table 15.--Eastern test: Seed data for Milan, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 603	20.9	3.06	1.05	10.7	4.0
McNair 235	21.1	3.26	1.08	9.4	4.0
Stoneville 825	20.0	3.11	1.13	17.1	2.5
Coker 310	20.6	3.30	1.02	8.4	4.0
Stoneville 213	20.3	3.15	1.17	13.8	4.0
Deltapine 55	19.9	3.29	1.27	12.3	4.0
McNair 220	21.0	3.15	1.20	9.3	4.0
Deltapine 26	19.7	3.14	1.10	9.4	4.0
Coker 315	20.5	3.28	1.17	9.3	3.5
Dixie King 3	20.8	3.06	1.14	11.2	4.0
Coker 304	21.3	3.35	1.10	11.9	3.5
Deltapine 61	20.8	3.02	1.08	10.2	4.0
Paymaster 303	21.5	3.37	1.04	17.8	4.0
Acala SJ-5	21.5	3.49	• 80	8.5	4.0
Ga Cot 79	20.9	2.99	1.12	10.6	4.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm ³)	surface area (mm ²)	density (g/cm ³)	(percent)	delinted- seed index
Stoneville 603	112.7	122.5	1.006	1.3	11.3
McNair 235	106.6	117.9	•995	3.5	11.1
Stoneville 825	108.3	119.2	1.004	3.3	10.9
Coker 310	110.6	120.9	1.000	2.8	11.1
Stoneville 213	112.3	122.1	1.013	3.8	11.4
Deltapine 55	102.6	115.0	1.013	2.8	10.4
Deltapine 55 McNair 220	102.6 115.5	115.0 124.5	1.013 .984	2.8 4.0	10.4 11.4
McNair 220	115.5	124.5	• 984	4.0	11.4
McNair 220 Deltapine 26	115.5 117.1	124.5 125.6	• 984 • 968	4.0 2.0	11.4 11.3
McNair 220 Deltapine 26 Coker 315	115.5 117.1 113.0	124.5 125.6 122.6	.984 .968 .978	4.0 2.0 2.8	11.4 11.3 10.8
McNair 220 Deltapine 26 Coker 315 Dixie King 3	115.5 117.1 113.0 116.0	124.5 125.6 122.6 124.8	.984 .968 .978 1.030	4.0 2.0 2.8 1.3	11.4 11.3 10.8 12.0
McNair 220 Deltapine 26 Coker 315 Dixie King 3 Coker 304	115.5 117.1 113.0 116.0 104.0	124.5 125.6 122.6 124.8 116.0	.984 .968 .978 1.030 1.020	4.0 2.0 2.8 1.3 3.5	11.4 11.3 10.8 12.0 10.6
McNair 220 Deltapine 26 Coker 315 Dixie King 3 Coker 304 Deltapine 61	115.5 117.1 113.0 116.0 104.0 115.5	124.5 125.6 122.6 124.8 116.0 124.4	.984 .968 .978 1.030 1.020	4.0 2.0 2.8 1.3 3.5	11.4 11.3 10.8 12.0 10.6 11.4
McNair 220 Deltapine 26 Coker 315 Dixie King 3	115.5 117.1 113.0 116.0 104.0	124.5 125.6 122.6 124.8 116.0	.984 .968 .978 1.030 1.020	4.0 2.0 2.8 1.3 3.5	11.4 11.3 10.8 12.0 10.6

Table 16.--Eastern test: Yield, boll, and spinning data for Rocky Mount, N. C.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 55	522 a	5.60	42.2	9.7	5.45
Ga Cot 79	503 ab	5.84	38.6	9.9	5.60
Stoneville 603	494 ab	5.08	39.7	9.6	5.65
Stoneville 825	469 ab	5.47	39.6	9.8	5.60
Stoneville 213	467 ab	5.30	39.2	9.8	5.60
McNair 235	445 ab	5.48	40.8	9.8	5.65
McNair 220	438 ab	5.99	40.3	9.6	5.60
Deltapine 61	436 ab	5.83	39.9	9.9	5.60
Coker 304	410 abc	5.45	40.3	9.9	5.30
Coker 310	409 abc	5.84	39.7	10.8	5.40
Dixie King 3	382 abc	5.96	40.2	10.0	5.10
Deltapine 26	373 bc	5.83	41.5	9.9	5.45
Coker 315	359 bc	5.24	40.5	8.8	5.10
Paymaster 303	289 cd	6.41	39.0	10.9	5.20
Acala SJ-5	205 d	6.03	37.8	11.9	5.15
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
Deltapine 55	1.11	0.55	76.2	9.2	11.6
Ga Cot 79	1.11	• 54	75.2	8.3	12.4
	1.11 1.10	• 54 • 54	75.2 73.4	8.3 8.7	12.4 12.1
Stoneville 603					
Stoneville 603 Stoneville 825	1.10	• 54	73.4	8.7	12.1
Stoneville 603 Stoneville 825 Stoneville 213	1.10 1.10	• 54 • 54	73.4 72.0	8.7 7.7	12.1 11.5
Stoneville 603 Stoneville 825 Stoneville 213 McNair 235	1.10 1.10 1.11	• 54 • 54 • 55	73.4 72.0 73.2	8.7 7.7 9.4	12.1 11.5 12.4
Stoneville 603 Stoneville 825 Stoneville 213 McNair 235 McNair 220	1.10 1.10 1.11 1.16	• 54 • 54 • 55 • 59	73.4 72.0 73.2 72.2	8.7 7.7 9.4 8.5	12.1 11.5 12.4 12.5
Stoneville 603 Stoneville 825 Stoneville 213 McNair 235 McNair 220 Deltapine 61	1.10 1.10 1.11 1.16 1.15	• 54 • 54 • 55 • 59 • 58	73.4 72.0 73.2 72.2 73.2	8.7 7.7 9.4 8.5 8.0	12.1 11.5 12.4 12.5 12.9
Stoneville 603 Stoneville 825 Stoneville 213 McNair 235 McNair 220 Deltapine 61 Coker 304	1.10 1.10 1.11 1.16 1.15 1.12	• 54 • 54 • 55 • 59 • 58 • 55	73.4 72.0 73.2 72.2 73.2 75.6	8.7 7.7 9.4 8.5 8.0 8.4	12.1 11.5 12.4 12.5 12.9 11.6
Stoneville 603 Stoneville 825 Stoneville 213 McNair 235 McNair 220 Deltapine 61 Coker 304	1.10 1.10 1.11 1.16 1.15 1.12 1.16	• 54 • 54 • 55 • 59 • 58 • 55 • 56	73.4 72.0 73.2 72.2 73.2 75.6 72.8	8.7 7.7 9.4 8.5 8.0 8.4	12.1 11.5 12.4 12.5 12.9 11.6 13.3
Stoneville 603 Stoneville 825 Stoneville 213 McNair 235 McNair 220 Deltapine 61 Coker 304 Dixie King 3	1.10 1.10 1.11 1.16 1.15 1.12 1.16 1.16	• 54 • 54 • 55 • 59 • 58 • 55 • 56	73.4 72.0 73.2 72.2 73.2 75.6 72.8 72.1	8.7 7.7 9.4 8.5 8.0 8.4 8.3	12.1 11.5 12.4 12.5 12.9 11.6 13.3 12.8
Stoneville 603 Stoneville 825 Stoneville 213 McNair 235 McNair 220 Deltapine 61 Coker 304 Dixie King 3 Deltapine 26	1.10 1.10 1.11 1.16 1.15 1.12 1.16 1.16	• 54 • 54 • 55 • 59 • 58 • 55 • 56 • 56 • 52	73.4 72.0 73.2 72.2 73.2 75.6 72.8 72.1 75.2	8.7 7.7 9.4 8.5 8.0 8.4 8.3 8.1	12.1 11.5 12.4 12.5 12.9 11.6 13.3 12.8
Ga Cot 79	1.10 1.10 1.11 1.16 1.15 1.12 1.16 1.16 1.16	• 54 • 54 • 55 • 59 • 58 • 55 • 56 • 56 • 52 • 58	73.4 72.0 73.2 72.2 73.2 75.6 72.8 72.1 75.2 74.3	8.7 7.7 9.4 8.5 8.0 8.4 8.3 8.1 8.7 9.0	12.1 11.5 12.4 12.5 12.9 11.6 13.3 12.8 11.7

Table 17.--Eastern test: Seed data for Rocky Mount, N. C.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 55	20.1	3.54	1.21	8.8	4.0
Ga Cot 79	20.7	3.54	1.17	8.2	5.5
Stoneville 603	20.1	3.60	1.36	10.2	4.5
Stoneville 825	20.2	3.65	1.41	10.7	4.0
Stoneville 213	19.7	3.40	1.33	11.9	4.0
McNair 235	20.8	3.63	1.01	9.3	4.5
McNair 220	21.3	3.68	1.00	9.2	5.0
Deltapine 61	20.8	3.45	1.00	9.0	5.5
Coker 304	20.2	3.78	1.07	7.3	4.0
Coker 310	20.4	3.68	1.12	9.2	4.0
Dixie King 3	20.6	3.61	1.11	10.1	4.0
Deltapine 26	19.4	3.40	1.12	9.3	5.0
Coker 315	20.5	3.63	1.13	11.2	4.0
Paymaster 303	21.1	3.58	1.00	9.5	3.5
Acala SJ-5	21.2	3.62	. 87	8.0	3.5
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm ³)	surface area (mm ²)	density (g/cm ³)	(percent)	delinted - seed index
Deltapine 55	83.6	100.0	1.051	2.3	8.8
Ga Cot 79	88.5	104.2	1.067	0.0	9.4
Stoneville 603	85.0	101.4	1.073	3.5	9.1
Stoneville 825	87.6	103.5	1.072	4.5	9.4
Stoneville 213	88.2	104.0	1.052	2.0	9.3
McNair 235	92.2	107.1	1.056	3.3	9.7
McNair 220	88.6	104.3	1.068	2.3	9.5
Deltapine 61	88.7	104.4	1.049	1.0	9.3
Coker 304	88.7	104.4	1.060	1.5	9.4
Coker 310	90.7	105.9	1.063	0.3	9.6
Dixie King 3	87.0	103.1	1.078	2.0	9.4
	100.4	113.4	•991	1.8	10.0
Deltapine 26	T 0 0 4 1				
	90.1	105.5	1.032	1.8	9.3
Deltapine 26 Coker 315 Paymaster 303	90.1 95.0	105.5 109.2	1.032 1.060	1.8 2.3	9.3 10.1

Table 18.--Eastern test: Yield, boll, and spinning data for Athens, Ga.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint	Seed index	Micronaire
	(1 <i>b</i> / <i>a</i> cre)	(8/0011)	percent	Index	reading
McNair 235	505 a	5.60	42.8	9.8	5.50
Stoneville 213	503 a	5.72	43.2	10.0	6.05
Coker 315	461 ab	6.08	43.9	10.5	5.75
McNair 220	459 ab	6.03	42.0	10.5	5.55
Stoneville 603	420 ab	5.93	42.4	9.5	5.65
Coker 304	405 abc	5.62	42.4	10.3	5.55
Coker 310	404 abc	6.01	41.9	10.5	5.60
Ga Cot 79	403 abc	5.26	41.4	9.5	5.50
Stoneville 825	389 bc	5.26	45.1	10.0	6.00
Deltapine 55	381 bc	5.56	43.6	9.8	5.55
Dixie King 3	373 bcd	6.12	41.3	10.5	5.40
Deltapine 26	355 bcd	5.56	43.9	10.0	5.95
Deltapine 61	310 cde	5.56	42.3	10.5	5.90
Paymaster 303	276 de	6.00	40.1	11.3	5.00
Acala SJ-5	248 e	5.76	40.8	11.3	5.25
	Span length (inches)			imeter	Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
M-N-4- 225	1 00	0.51	62.5	9.7	11.8
McNair 235	1.08		63.5		
Stoneville 213	1.08	• 52	62.6 62.0	10.4 10.3	11.0 11.5
Coker 315	1.11	•52	62.6	9.9	11.6
McNair 220	1.07	•51	61.6	9.8	11.3
Stoneville 603	1.06	•51		10.1	12.3
Coker 304	1.14	• 52	64.5	10.4	11.8
Coker 310	1.10	•51	60.9		
Ga Cot 79	1.11	•51	63.1	9.6	11.1
Stoneville 825	1.07	•50	62.7	10.1	11.3
Deltapine 55	1.09	•51	61.1	10.0	11.2
Dixie King 3	1.08	•50	62.6	10.0	11.3
Deltapine 26	1.06	•51	61.6	10.1	10.5
Deltapine 61	1.08	• 50 • 48	62.2	10.2	11.5
	1 /10	/i X	62.2	101	10.2
Paymaster 303 Acala SJ-5	1.08 1.11	•53	63.9	9.6	13.7

Table 19.--Eastern test: Seed data for Athens, Ga.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 235	18.7	3.79	0.73	9.7	6.0
Stoneville 213	16.2	3.66	.80	12.9	5.0
Coker 315	18.4	3.77	.76	13.1	5.0
McNair 220	18.6	3.74	.73	11.4	6.0
Stoneville 603	17.6	3.65	•69	10.9	6.0
Coker 304	18.6	3.68	• 84	13.3	5.0
Coker 310	17.7	3.71	•80	10.5	5.0
Ga Cot 79	18.5	3.62	•76	12.5	6.0
Stoneville 825	15.7	3.56	•56	NA	4.0
Deltapine 55	18.8	3.77	• 80	10.9	6.0
Dixie King 3	18.0	3.65	•86	11.3	5.0
Deltapine 26	15.8	3.72	•58	9.4	6.0
Deltapine 61	18.8	3.59	•69	11.2	5.0
Paymaster 303	18.1	3.79	•76	11.2	5.0
Acala SJ-5	18.8	3.86	•76	9.8	5.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm ³)	surface area (mm²)	density (g/cm ³)	(percent)	delinted- seed index
McNair 235	86.2	102.4	1.051	0.5	9.1
Stoneville 213	93.3	108.0	•985	1.5	9.2
Coker 315	89.8	105.2	1.047	0.5	9.4
McNair 220	87.7	103.6	1.014	1.0	9.1
Stoneville 603	93.6	108.2	•994	1.5	9.3
Coker 304	92.3	107.2	1.058	2.0	9.8
Coker 310	97.4	111.1	1.035	5.0	10.1
Ga Cot 79	89.7	105.2	•986	1.0	8.8
Stoneville 825	NA	NA	NA	NA	NA
Deltapine 55	84.0	100.7	•993	2.0	8.3
Dixie King 3	93.5	108.1	1.016	1.0	9.5
Deltapine 26	96.4	110.3	•978	0.0	9.4
Deltapine 61	96.6	110.6	•983	3.5	9.5
Paymaster 303	105.6	117.2	•963	4.0	10.5
Acala SJ-5	102.6	117.2	1.026	4.5	10.5

Table 20.--Eastern test: Yield, boll, and spinning data for Auburn, Ala.

Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
472 a	5.21	38.2	NA	5.25
435 ab	5.65			5.00
424 abc	4.82	39.3		5.00
420 abc	4.91	37.2		4.70
394 bcd	4.56	35.1	NA	4.70
383 bcd	4.70	38.1	NA	5.15
382 bcd	4.75	40.1		5.05
357 cde	5.15			4.65
342 de	4.98	36.7		5.20
				4.60
				4.90
				4.75
				4.65
				4.50
84 g	3.89	36.5	NA	3.90
Span length (inches)			imeter	Yarn
2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
1.14	0.56	75.9	8.1	12.2
				12.0
				12.5
				12.0
				11.4
				12.1
				11.0
1.16	• 52	76.5	8.6	12.2
	· - -			
1.16	• 58	/8.9	8 • 4	11 • /
1.16 1.20	•58 •58	78.9 75.8	8.4 9.1	11.7 12.1
1.20	•58	75.8	9.1 8.7	12.1 12.7
1.20 1.22	•58 •60	75.8 75.9	9.1 8.7	12.1 12.7
1.20 1.22 1.12	•58 •60 •52	75.8 75.9 77.6	9.1 8.7 8.5	12.1 12.7 12.5
1.20 1.22	•58 •60	75.8 75.9	9.1 8.7	12.1 12.7
	(1b/acre) 472 a 435 ab 424 abc 420 abc 394 bcd 383 bcd 382 bcd 357 cde 342 de 339 de 330 de 311 ef 262 f 84 g Span length (2.5% 1.14 1.17 1.16 1.13 1.14 1.18 1.15	(1b/acre) (g/boll) 472 a 5.21 435 ab 5.65 424 abc 4.82 420 abc 4.91 394 bcd 4.56 383 bcd 4.70 382 bcd 4.75 357 cde 5.15 342 de 4.98 339 de 4.86 330 de 4.98 311 ef 5.62 262 f 5.59 84 g 3.89 Span length (inches) 2.5% 50% 1.14 0.56 1.15 .54 1.18 .56 1.15 .55	(1b/acre) (g/boll) percent 472 a 5.21 38.2 435 ab 5.65 36.4 424 abc 4.82 39.3 420 abc 4.91 37.2 394 bcd 4.56 35.1 383 bcd 4.70 38.1 382 bcd 4.75 40.1 357 cde 5.15 37.4 342 de 4.98 36.7 339 de 4.86 36.8 333 de 5.21 38.0 330 de 4.98 38.2 311 ef 5.62 36.7 262 f 5.59 35.5 84 g 3.89 36.5 Span length (inches) Color 2.5% 50% Rd 1.14 0.56 75.9 1.17 .56 79.3 1.16 .57 74.1 1.13 .54 77.0 1.14 .54 76.3 1.18 .56 77.0 1.15 .55 77.5	(1b/acre) (g/boll) percent index 472 a 5.21 38.2 NA 435 ab 5.65 36.4 NA 424 abc 4.82 39.3 NA 420 abc 4.91 37.2 NA 394 bcd 4.56 35.1 NA 383 bcd 4.70 38.1 NA 382 bcd 4.75 40.1 NA 357 cde 5.15 37.4 NA 342 de 4.98 36.7 NA 339 de 4.86 36.8 NA 330 de 4.98 38.2 NA 311 ef 5.62 36.7 NA 262 f 5.59 35.5 NA 84 g 3.89 36.5 NA Span length (inches) 2.5% 50% Colorimeter Rd Hunter's b value 1.14 0.56 75.9 8.1 1.17 .56 79.3 8.8 1.16 .57 74.1 7.4 1.13 .54 77.0 8.2 1.14 .54 76.3 8.8 1.18 .56 77.0 8.3 </td

Table 21.--Eastern test: Seed data for Auburn, Ala.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 220	20.7	3.44	•92	NA	4.0
Ga Cot 79	19.5	3.36	•90	NA	4.0
McNair 235	20.4	3.25	•90	NA	4.0
Stoneville 603	20.0	3.23	• 97	NA	4.0
Stoneville 213	18.9	3.16	1.06	NA	3.5
Stoneville 825	19.0	3.29	1.04	NA	4.0
Deltapine 55	19.2	3.37	• 86	NA	4.0
Coker 304	20.7	3.53	• 90	NA	4.0
Deltapine 61	19.1	3.06	• 96	NA	4.0
Coker 310	20.0	3.43	•95	NA	4.0
Coker 315	20.6	3.44	• 98	NA	4.0
Deltapine 26	17.9	3.21	.81	NA	4.0
Dixie King 3	19.9	3.30	1.03	NA	4.0
Paymaster 303	20.4	3.49	•83	NA	4.0
Acala SJ-5	19.3	3.51	•81	NA	4.0

DELTA REGIONAL COTTON VARIETY TEST

Table 22.--Delta test: Yield, boll, and spinning data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 41	1006 a	5.65 d	41.8 a	10.2 c	4.66 bcd
Deltapine 55	948 Ъ	5.88 cd	39.4 bc	10.9 c	4.63 cd
Des 56	930 Ъ	5.64 d	37.3 de	11.3 abc	4.59 d
Stoneville 825	911 Ъ	5.67 d	38.1 cd	11.6 abc	4.92 a
McNair 235	881 b	5.88 cd	38.7 bcd	ll.l abc	4.68 bcd
Deltapine 61	843 c	6.02 bc	40.2 ab	11.0 bc	4.78 abc
Stoneville 213	815 c	5.91 cd	36.8 de	11.6 abc	4.82 ab
Coker 310	803 cd	6.14 bc	37.9 cde	11.7 abc	4.62 cd
Coker 304	774 d	6.17 bc	37.7 cde	11.6 abc	4.53 de
Paymaster 303	661 e	6.52 a	36.0 e	12.8 a	4.43 ef
Acala SJ-5	342 f	6.29 ab	36.9 de	12.7 ab	4.37 f
	Span length	(inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Deltapine 41	1.18 cde	0.57 cd	75.3 abc	8.3 ab	13.0 de
Deltapine 55	1.20 c	•58 cd	75.5 ab	8.3 ab	12.7 efg
Des 56	1.18 cde	•57 cd	75.0 bcd	8.1 bc	12.6 fgh
Stoneville 825	1.17 de	•57 d	75.2 abc	7.8 c	12.4 gh
McNair 235	1.19 cd	•58 cd	74.1 de	8.0 bc	13.1 cd
Deltapine 61	1.22 b	.60 ab	76.0 a	8.5 a	12.9 def
Stoneville 213	1.16 ef	•57 d	74.3 cde	8.5 a	11.9 i
Coker 310	1.23 ab	•59 bc	73.5 e	8.3 ab	13.3 bc
		•60 a	73.6 e	8.3 ab	13.6 b
Coker 304	1•24 a	• 00 1			
Coker 304 Paymaster 303	1.24 a 1.15 f	•55 e	74.7 bcd	8.6 a	12.3 h

Table 23.--Delta test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	18.0 d	3.29 c	1.08 bc	11.7 bcd	4.3 ab
Deltapine 55	19.2 bc	3.25 cde	1.21 a	12.1 bc	3.8 bc
Des 56	20.2 b	3.29 c	1.25 a	11.6 bcd	3.8 bc
Stoneville 825	18.8 c	3.14 fg	1.25 a	13.4 a	3.5 cd
McNair 235	20.3 ab	3.26 cd	1.06 c	11.2 cd	3.8 bc
Deltapine 61	19.3 bc	3.10 g	1.05 c	11.5 bcd	4.4 a
Stoneville 213	19.0 c	3.19 ef	1.20 a	13.5 a	3.2 d
Coker 310	20.2 b	3.21 def	1.13 b	12.2 b	3.4 cd
Coker 304	20.7 ab	3.29 c	1.12 b	12.1 bc	3.9 abc
Paymaster 303	21.0 a	3.36 b	•95 d	11.1 d	3.6 cd
Acala SJ-5	20.7 ab	3.45 a	•84 e	9.9 e	3.6 cd
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm ³)	surface area (mm ²)	density (g/cm ³)	(percent)	delinted- seed index
Deltapine 41	90.0 d	105.2 d	1.004 cd	4.4 bc	9.0 e
Deltapine 55	92.5 cd	107.3 cd	1.028 ab	3.8 bc	9.5 d
Des 56	96.6 b	110.4 b	1.029 ab	2.2 c	9.9 bc
Stoneville 825	96.9 ъ	110.7 ь	1.020 abc	5.6 ab	9.9 bcd
McNair 235	96.0 bc	109.9 bc	1.002 cd	6.7 a	9.6 cd
Deltapine 61	95.5 bc	109.6 bc	.998 d	3.4 c	9.5 d
Stoneville 213	97.4 Ъ	111.0 b	1.022 abc	4.3 bc	10.0 bc
Coker 310	97.5 Ъ	111.0 b	1.037 a	3.6 bc	10.1 b
Coker 304	98.2 Ъ	111.6 b	1.027 ab	2.7 c	10.1 b
Paymaster 303	111.2 a	121.3 a	1.013 bcd	3.9 bc	11.3 a
Acala SJ-5	108.5 a	119.4 a	1.035 a	3.9 bc	11.2 a

Table 24.--Delta test: Yield, boll, and spinning data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
St. Joseph, La	1241 a	5.55 c	40.5 a	11.2 c	4.77 b.
Portageville, Mo	1028 Ъ	6.79 a	38.9 b	12.2 a	4.92 a
Stoneville, Miss	986 c	5.49 c	39.1 b	10.7 d	4.54 c
Marianna, Ark	637 d	NA	37.0 c	12.0 ab	4.76 Ъ
Clarkedale, Ark	566 d	NA	37.0 c	11.1 c	4.35 d
Tunica, Miss	404 e	6.09 b	37.0 c	11.9 в	4.49 c
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
St. Joseph, La	1.20 a	0.59 ab	74.1 b	7.5 c	12.9 a
Portageville, Mo	1.17 c	•55 c	70.0 c	8.4 b	12.5 b
Stoneville, Miss	1.19 b	•58 ab	75.9 a	8.4 b	13.0 a
Marianna, Ark	1.19 b	•58 b	75.8 a	8.8 a	13.0 a
Clarkedale, Ark	1.20 a	•58 b	76.4 a	8.7 a	13.2 a
Tunica, Miss	1.20 a	•59 a	75.9 a	7.6 c	13.1 a

NA, Data not available.

Table 25.--Delta test: Seed data by test location

Location	0i1 (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
St. Joseph, La Stoneville, Miss Marianna, Ark Clarkedale, Ark Tunica, Miss	21.5 a 20.1 b 19.4 c 18.6 d 19.1 cd	2.94 c 3.03 c 3.30 b 3.46 ab 3.56 a	1.23 a 1.21 a 1.06 a 1.00 a 1.02 a	11.9 b 13.0 a 12.0 ab 11.8 b 10.6 c	4.3 a 3.6 b 3.1 b 3.2 b 4.6 a
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
St. Joseph, La Stoneville, Miss Marianna, Ark Clarkedale, Ark Tunica, Miss	90.7 b 91.5 b 105.9 a 101.1 a 101.9 a	105.8 b 106.5 b 117.4 a 113.8 a 114.4 a	1.035 a 1.040 a .997 b .968 b 1.058 a	2.3 b 3.0 b 4.3 b 7.8 a 2.7 b	9.4 c 9.5 bc 10.6 a 9.8 b 10.8 a

Table 26.--Delta test: Yield, boll, and spinning data for St. Joseph, La.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 41	1582 a	5.01	45.1	9.8	5.00
Deltapine 55	1475 Ъ	5.57	42.0	10.5	4.75
McNair 235	1390 bc	5.23	41.4	11.6	5.00
Des 56	1359 bc	5.09	39.3	10.6	4.65
Stoneville 825	1286 cd	5.22	40.0	11.2	4.90
Stoneville 213	1282 cd	5.35	38.6	11.4	4.80
Deltapine 61	1244 cde	5.64	41.0	10.4	4.95
Coker 310	1187 de	5.81	40.5	11.5	4.70
Coker 304	1125 fe	5.86	39.7	11.2	4.60
Paymaster 303	1011 f	6.41	37.8	12.8	4.50
Acala SJ-5	707 g	5.91	40.0	12.1	4.65
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
Deltapine 41	1.18	0.58	75.6	7.8	12.8
Deltapine 55	1.20	•57	74.3	7.4	12.2
McNair 235	1.19	•57	74.2	7.6	12.8
Des 56	1.19	•57	72.8	6.9	12.7
Stoneville 825	1.21	•59	74.8	7.3	12.6
Stoneville 213	1.18	•57	71.3	7.3	11.6
Deltapine 61	1.21	•61	76.4	8.3	12.7
Coker 310	1.27	•62	71.8	7.2	13.3
Coker 304	1.24	•62	72.8	7.5	13.9
Paymaster 303	1.18	•57	74.8	8.1	12.7

Table 27.--Delta test: Seed data for St. Joseph, La.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	19.8	3.02	1.20	11.5	4.5
Deltapine 55	21.0	3.02	1.30	12.4	4.0
McNair 235	22.4	2.94	1.08	11.3	4.5
Des 56	22.1	2.92	1.37	11.5	5.0
Stoneville 825	20.4	2.87	1.43	13.5	4.5
Stoneville 213	20.8	2.86	1.42	13.4	4.0
Deltapine 61	20.8	2.79	1.19	11.7	5.0
Coker 310	22.2	2.90	1.24	11.8	4.0
Coker 304	22.5	3.00	1.23	12.1	4.0
Paymaster 303	22.5	3.01	1.11	10.7	4.0
Acala SJ-5	22.4	3.04	1.01	10.6	3.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Deltapine 41	77.0	95.0	1.033	1.3	8.0
Deltapine 55	84.4	101.0	1.061	1.5	9.0
McNair 235	91.8	106.7	1.029	2.8	9.4
Des 56	89.9	105.3	1.027	1.8	9.2
Stoneville 825	89.2	104.8	1.035	4.0	9.2
Stoneville 213	89.5	105.0	1.046	2.5	9.4
Deltapine 61	88.2	104.0	1.020	1.8	9.0
Coker 310	88.4	104.1	1.061	2.8	9.4
Coker 304	91.6	106.6	1.029	0.8	9.4
Paymaster 303	107.0	118.2	1.011	2.8	10.8
	100.5	113.4	1.032	3.5	10.4

Table 28.--Delta test: Yield, boll, and spinning data for Stoneville, Miss.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 41	1244 a	5.54	42.1	9.8	4.60
Des 56	1173 ab	5.20	38.7	10.3	4.45
Deltapine 55	1162 ab	5.50	40.8	10.2	4.45
Stoneville 825	1146 abc	5.34	38.4	11.0	4.70
McNair 235	1064 bcd	5.42	39.3	10.5	4.55
Coker 310	1038 cd	5.49	39.6	11.2	4.60
Deltapine 61	1032 cd	5.75	39.9	10.4	4.95
Stoneville 213	1028 d	5.46	37.7	10.9	4.80
Coker 304	1022 d	5.52	39.3	10.5	4.45
Paymaster 303	729 e	5.82	37.0	12.0	4.25
Acala SJ-5	218 f	5.32	37.2	11.6	4.20
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
Deltapine 41	1.19	0.59	77.3	8.7	13.4
Des 56	1.18	•59	76.8	8.5	12.7
Deltapine 55	1.21	•59	77.3	8.6	12.9
Stoneville 825	1.17	•57	76.2	8.0	12.9
McNair 235	1.19	•58	74.7	8.2	12.9
Coker 310	1.23	•60	74.5	8.4	13.1
Deltapine 61	1.20	•60	77.6	8.7	12.4
Stoneville 213	1.16	•59	75.2	8.9	12.3
Coker 304	1.23	•61	75.2	8.2	13.6
Paymaster 303	1.14	•55	76.4	8.9	12.4

Table 29.--Delta test: Seed data for Stoneville, Miss.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	17.4	3.13	1.20	12.8	4.5
Des 56	20.5	3.09	1.35	12.4	3.5
Deltapine 55	19.4	3.05	1.41	12.4	3.5
Stoneville 825	19.4	2.92	1.31	13.9	3.5
McNair 235	21.2	2.98	1.18	12.3	3.5
Coker 310	20.9	2.94	1.28	14.4	3.0
Deltapine 61	19.8	2.87	1.18	13.1	4.0
Stoneville 213	19.3	3.02	1.33	14.0	3.0
Coker 304	21.4	2.98	1.20	13.7	4.0
Paymaster 303	20.9	3.12	1.02	12.5	4.0
Acala SJ-5	21.0	3.23	•85	11.4	3.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Deltapine 41	83.8	100.5	1.028	1.0	8.6
Des 56	87.9	103.8	1.061	2.3	9.3
Deltapine 55	86.2	102.4	1.043	4.0	9.0
Stoneville 825	92.5	107.3	1.047	5.5	9.7
McNair 235	90.8	106.0	1.028	2.8	9.3
Coker 310	86.7	102.8	1.068	2.3	9.3
Deltapine 61	90.2	105.6	1.018	2.0	9.2
Stoneville 213	93.4	108.0	1.040	2.0	9.7
Coker 304	87.4	103.3	1.058	3.3	9.2
Paymaster 303	105.0	116.8	1.001	4.8	10.6
Acala SJ-5	102.8	115.2	1.041	2.8	10.7

Table 30.--Delta test: Yield, boll, and spinning data for Portageville, Mo.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 825	1178 a	6.40	39.3	12.5	5.10
McNair 235	1139 ab	6.95	39.7	11.8	5.20
Deltapine 41	1121 ab	6.25	42.8	10.1	4.85
Coker 310	1098 ab	6.85	38.7	11.8	5.00
Deltapine 55	1094 ab	6.45	39.8	11.3	4.75
Stoneville 213	1090 ab	6.80	38.2	12.3	5.00
Deltapine 61	1066 ab	6.60	39.7	11.9	5.05
Des 56	1065 ab	6.35	37.3.	12.4	4.60
Coker 304	1000 ь	7.20	38.5	12.8	5.00
Paymaster 303	850 c	7.20	37.6	13.5	4.85
Acala SJ-5	615 d	7.60	36.8	14.3	4.70
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
Stoneville 825	1.15	0.54	71.1	8.0	11.8
McNair 235	1.15	•56	68.9	7.9	12.8
Deltapine 41	1.16	• 54	70.0	8.4	12.3
Coker 310	1.21	•57	69.4	8.7	13.2
Deltapine 55	1.19	•55	71.1	8.3	12.4
Stoneville 213	1.14	• 54	70.2	8.9	11.5
Deltapine 61	1.20	•57	70.6	8.6	12.3
Des 56	1.16	•53	70.9	8.3	12.3
Coker 304	1.20	• 5.7	69.6	8.6	12.7
Paymaster 303	1.14	•53	69.2	8.6	11.8
Acala SJ-5	1.19	•56	69.5	8.4	14.5

Table 31.--Delta test: Yield, boll, and spinning data for Marianna, Ark.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 41	876 a	NA	41.1	11.8	4.90
Des 56	736 ab	NA	36.2	11.6	4.85
Deltapine 55	726 ab	NA	37.7	11.8	4.85
McNair 235	689 ab	NA	39.5	11.5	4.75
Deltapine 61	688 ab	NA	37.2	10.9	4.55
Stoneville 825	670 ab	NA	38.1	11.6	5.35
Stoneville 213	625 b	NA	35.7	12.3	5.00
Paymaster 303	583 Ъ	NA	34.9	13.3	4.55
Coker 304	568 Ъ	NA	36.0	12.5	4.65
Coker 310	525 b	NA	35.7	12.2	4.45
Acala SJ-5	319 с	NA	35.6	13.1	4.45
	Span length ((inches)	Color	Yarn	
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Deltapine 41	1.15	0.55	75.5	8.9	12.7
Des 56	1.17	•58	77.2	8.6	12.1
Deltapine 55	1.19	•58	76.9	8.7	12.8
McNair 235	1.20	•58	74.8	8.8	13.5
Deltapine 61	1.21	•60	76.8	8.8	13.2
Stoneville 825	1.16	•57	76.2	8.7	12.5
Stoneville 213	1.18	•58	76.0	9.1	12.3
Paymaster 303	1.15	•55	75.5	9.2	11.7
Coker 304	1.25	•61	75.5	9.2	13.7
Coker 310	1.24	•57	74.5	9.0	13.4
Acala SJ-5	1.18	• 58	75.2	8.6	14.9

NA, Data not available.

Table 32.--Delta test: Seed data for Marianna, Ark.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 41	18.7	3.23	1.10	11.3	3.5
Des 56	20.4	3.40	1.28	11.6	3.0
Deltapine 55	18.8	3.27	1.20	13.0	3.5
McNair 235	20.5	3.20	1.05	10.6	3.0
Deltapine 61	18.6	3.12	•99	11.5	4.0
Stoneville 825	18.4	3.16	1.19	14.2	3.0
Stoneville 213	18.3	3.13	1.17	14.0	2.5
Paymaster 303	20.4	3.46	•77	11.9	3.0
Coker 304	20.6	3.34	1.11	11.8	3.0
Coker 310	19.4	3.33	1.02	12.4	3.0
Acala SJ-5	19.8	3.65	.76	9.8	3.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Deltapine 41	107.8	118.7	0.975	4.5	10.5
Des 56	101.7	114.4	1.013	2.5	10.3
Deltapine 55	103.6	115.7	•993	2.0	10.3
Mc Nair 235	104.5	116.4	•979	8.8	10.2
Deltapine 61	101.4	114.1	•952	5.0	9.6
Stoneville 825	100.0	113.1	•996	3.5	10.0
Stoneville 213	103.2	115.5	•996	3.8	10.5
Paymaster 303	114.2	123.5	1.024	4.3	11.7
Coker 304	107.7	118.8	1.019	2.0	11.0
Coker 310	108.4	119.3	• 980	6.8	10.6
Acala SJ-5	112.8	122.5	1.042	4.5	11.7

Table 33.--Delta test: Yield, boll, and spinning data for Clarkedale, Ark.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 55	761 a	NA	37.8	10.3	4.50
Deltapine 61	736 a	NA	47.3	10.8	4.55
Des 56	676 a	NA	35.5	11.0	4.45
Deltapine 41	672 a	NA	39.1	9.7	4.15
Coker 304	583 ab	NA	35.7	11.5	4.15
Stoneville 825	571 ab	NA	36.5	11.5	4.75
Coker 310	567 ab	NA	36.0	11.5	4.40
Paymaster 303	557 ab	NA	33.5	12.7	4.20
McNair 235	550 ab	NA	36.0	9.5	3.95
Stoneville 213	446 Ъ	NA	34.4	11.2	4.60
Acala SJ-5	110 c	NA	35.8	12.7	4.10
	Span length (inches)	Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Deltapine 55	1.21	0.59	77.3	8.9	13.2
Deltapine 61	1.25	•62	78.0	8.2	13.7
Des 56	1.20	•58	77.4	8.7	13.0
Deltapine 41	1.21	•59	76.2	8.5	13.5
Coker 304	1.25	•60	73.2	8.9	13.9
Stoneville 825	1.20	•58	77.8	8.3	12.4
Coker 310	1.23	•57	75.6	9.0	13.1
Paymaster 303	1.14	•52	77.2	8.8	12.6
McNair 235	1.21	•59	76.4	8.7	13.2
Stoneville 213	1.16	•56	75.7	9.5	11.7
Acala SJ-5	1.22	.61	75.6	8.9	14.8

NA, Data not available.

Table 34.--Delta test: Seed data for Clarkedale, Ark.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 55	18.2	3.37	1.08	11.8	3.0
Deltapine 61	18.2	3.30	1.01	11.5	3.5
Des 56	18.9	3.49	1.16	12.0	3.0
Deltapine 41	16.7	3.54	•91	11.2	3.0
Coker 304	19.5	3.55	1.04	11.9	3.5
Stoneville 825	17.6	3.35	1.14	12.9	3.0
Coker 310	19.0	3.32	1.05	11.8	3.0
Paymaster 303	20.7	3.58	• 96	10.5	3.5
McNair 235	17.5	3.61	•91	11.9	3.0
Stoneville 213	17.8	3.40	• 93	14.6	3.0
Acala SJ-5	20.7	3.60	• 81	9.6	3.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Deltapine 55	92 • 2	107.1	0.983	8.0	9.1
Deltapine 61	100.7	113.6	•950	5.8	9.6
Des 56	99.9	112.9	•973	2.8	9.7
Deltapine 41	90.3	105.6	• 944	8.8	8.5
Coker 304	102.2	114.7	•988	5.3	10.1
Stoneville 825	104.0	116.0	•953	10.8	9.9
Coker 310	102.2	114.7	•990	5.5	10.1
Paymaster 303	116.1	124.9	•982	5.0	11.4
McNair 235	89.6	105.1	•934	18.0	8.4
Stoneville 213	99.8	112.9	•959	11.0	9.6
Acala SJ-5	115.3	124.3	•993	5.0	11.4

Table 35.--Delta test: Yield, boll, and spinning data for Tunica, Miss.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 825	616 a	5.72	36.6	12.1	4.75
Des 56	573 a	5.93	36.7	12.0	4.55
Deltapine 41	541 a	5.81	40.8	10.4	4.45
McNair 235	455 Ъ	5.94	36.6	12.1	4.60
Deltapine 55	441 b	5.99	38.2	11.4	4.45
Stoneville 213	418 Ъ	6.04	36.4	11.9	4.70
Coker 310	404 Ъ	6.41	37.1	12.1	4.55
Coker 304	388 Ъ	6.10	37.3	11.6	4.35
Deltapine 61	294 с	6.10	36.5	11.9	4.65
Paymaster 303	235 с	6.66	35.6	12.9	4.20
Acala SJ-5	85 d	6.34	35.9	12.7	4.10
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 825	1.17	0.56	75.4	6.7	12.3
Des 56	1.20	•59	75.3	7.5	12.6
Deltapine 41	1.20	•59	77.1	7.8	13.3
McNair 235	1.20	•60	75.7	6.9	13.4
Deltapine 55	1.21	•58	76.1	7.9	12.8
Stoneville 213	1.18	•57	77.4	7.7	11.9
Coker 310	1.24	•60	75.4	7.7	13.9
Coker 304	1.25	•62	75.6	7.3	13.8
Deltapine 61	1.24	•62	77.1	8.3	13.0
Paymaster 303	1.17	•58	75.7	8.0	12.4
Acala SJ-5	1.22	•63	74.7	8.0	14.9

Table 36.--Delta test: Seed data for Tunica, Miss.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 825	18.2	3.44	1.16	12.5	3.5
Des 56	19.3	3.53	1.09	10.6	4.5
Deltapine 41	17.2	3.55	1.01	11.7	6.0
McNair 235	20.0	3.61	1.06	9.9	5.0
Deltapine 55	18.6	3.55	1.05	10.6	5.0
Stoneville 213	18.8	3.53	1.18	11.8	3.5
Coker 310	19.7	3.56	1.07	10.7	4.0
Coker 304	19.5	3.59	1.01	10.8	5.0
Deltapine 61	19.0	3.44	.89	9.8	5.5
Paymaster 303	20.5	3.64	•91	9.9	3.5
Acala SJ-5	19.5	3.75	•77	8.0	5.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Stoneville 825	98.9	112.2	1.067	4.3	10.5
Des 56	103.7	115.9	1.073	1.8	11.1
Deltapine 41	91.0	106.1	1.043	6.3	9.5
McNair 235	103.2	115.5	1.039	1.3	10.7
Deltapine 55	96.4	110.3	1.063	3.5	10.2
Stoneville 213	101.0	113.9	1.072	2.3	10.8
Coker 310	102.0	114.5	1.089	0.5	11.1
Coker 304	102.1	114.7	1.039	2.0	10.6
Deltapine 61	97.1	110.9	1.053	2.3	10.2
Paymaster 303	113.9	123.3	1.044	2.5	11.9
Acala SJ-5	111.4	121.5	1.070	3.5	11.9

CENTRAL REGIONAL COTTON VARIETY TEST

Table 37.--Central test: Yield, boll, and spinning data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 55	1043 a	5.18 d	39.6 a	9.4 c	4.66 abc
Mc Nair 220	959 Ъ	5.14 d	38.5 ъ	9.5 bc	4.58 cd
Deltapine 16	935 Ъ	5.56 bc	37.3 cd	9.9 b	4.63 bc
Coker 310	927 Ъ	5.41 cd	37.8 bc	9.9 b	4.58 cd
Stoneville 825	927 Ъ	5.15 d	37.6 cd	10.0 ь	4.84 ab
Stoneville 213	908 Ъ	5.23 d	37.5 cd	9.9 Ъ	4.86 a
Paymaster 303	827 c	5.76 ъ	36.0 e	11.1 a	4.38 d
Acala SJ-5	655 d	6.10 a	36.9 d	11.2 a	4.60 c
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	\overline{R}_d	Hunter's b value	tenacity (cN/tex)
Deltapine 55	1.14 ab	0.55 bc	71.7 b	7.1 bcd	12.3 b
McNair 220 ·····	1.09 c	•53 cd	69.1 d	7.0 de	12.5 b
Deltapine 16	1.13 b	•54 cd	73.8 a	7.4 ab	12.3 b
Coker 310	1.16 a	•55 b	68.8 d	7.2 bcd	12.4 b
Stoneville 825	1.13 b	•55 b	70.9 bc	6.7 e	11.9 bc
Stoneville 213	1.12 b	•53 bcd	69.8 cd	7.3 abc	11.7 c
Paymaster 303	1.09 c	•51 d	71.6 b	7.6 a	12.0 bc
Acala SJ-5	1.14 ab	•57 a	70.7 bc	7.0 cde	14.9 a

Table 38.--Central test: Seed data by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 55 McNair 220 Deltapine 16 Coker 310 Stoneville 825 Stoneville 213 Paymaster 303 Acala SJ-5	19.2 de 19.8 bc 20.3 ab 19.7 cd 18.7 e 19.0 e 20.1 abc 20.5 a	3.30 bc 3.35 bc 3.22 c 3.36 b 3.33 bc 3.30 bc 3.40 b 3.67 a	1.13 a .87 c .96 b .99 b 1.14 a 1.08 a .77 d .66 e	11.3 c 11.6 bc 11.8 bc 12.3 bc 12.7 ab 13.5 a 12.0 bc 9.5 d	4.1 abc 4.4 ab 4.5 a 4.0 bc 3.9 c 3.8 c 3.9 c 4.0 bc
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Deltapine 55 McNair 220 Deltapine 16 Coker 310 Stoneville 825 Stoneville 213 Paymaster 303 Acala SJ-5	84.2 b 91.0 b 89.0 b 88.0 b 90.5 b 89.4 b 103.1 a 102.0 a	100.8 b 103.6 b 104.6 b 103.4 b 105.7 b 105.8 b 115.4 a 114.6 a	1.020 ab .992 d 1.034 a 1.028 ab 1.004 cd 1.017 bc .993 d 1.021 ab	2.9 bc 2.9 bc 3.7 abc 2.3 c 4.8 a 2.3 c 4.0 ab 2.9 bc	8.6 c 9.0 b 9.2 b 9.0 b 9.1 b 9.1 b 10.2 a 10.4 a

Table 39.--Central test: Yield, boll, and spinning data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Bossier City, La College Station,	1140 a	5.70 a	38.0 b	11.7 a	4.59 b
Tex	1054 Ъ	5.32 b	34.8 c	9.8 Ъ	4.44 c
Weslaco, Tex	772 c	5.33 ъ	39.4 a	9.9 b	4.64 b
Nueces County, Tex.	622 d	5.41 Ъ	38.5 ъ	9.1 c	4.88 a
	Span length (i	nches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Bossier City, La College Station,	1.20 a	0.58 a	73.0 a	6.9 c	13.0 a
Tex.	1.17 b	•56 b	70.0 ъ	6.5 d	12.8 a
Weslaco, Tex	1.07 c	•51 c	69.9 b	7.9 a	12.0 b
Nueces County, Tex.	1.07 c	•52 c	70.3 в	7.4 b	12.2 b

Table 40.--Central test: Seed data by test location

Location	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Bossier City, La College Station,	20.5 a	3.57 a	1.02 a	10.4 c	4.2 ab
Tex	18.9 b	3.40 ъ	•96 a	13.4 a	3.4 b
Weslaco, Tex	19.6 b	3.29 bc	∙86 a	11.5 bc	4.1 ab
Nueces County, Tex.	19.6 ab	3.20 c	•96 a	12.1 ab	4.6 a
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Bossier City, La College Station,	97.3 a	111.0 a	1.034 a	2.3 bc	10.0 a
Tex	93.0 a	108.1 a	1.016 a	5.5 a	9.5 b
Weslaco, Tex	90.3 a	104.2 a	1.000 a	3.5 b	9.0 c
Nueces County, Tex.	88.0 a	103.7 a	1.003 a	1.5 c	8.8 c

Table 41.--Central test: Yield, boll, and spinning data for Bossier City, La.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 55	1383 a	5.43	40.6	10.8	4.65
McNair 220	1225 b	5.28	38.7	10.6	4.50
Stoneville 825	1201 b	5.30	37.8	11.9	4.80
Stoneville 213	1183 ъ	5.46	37.4	11.9	4.70
Deltapine 16	1170 Ъ	6.08	37.5	11.9	4.65
Coker 310	1106 bc	5.73	37.5	11.2	4.40
Paymaster 303	1013 с	6.12	36.2	12.5	4.30
Acala SJ-5	845 d	6.20	38.2	13.2	4.70
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Deltapine 55	1.22	0.59	73.9	7.1	12.3
McNair 220	1.16	•56	68.2	5.7	13.2
Stoneville 825	1.19	•58	71.6	6.1	12.3
Stoneville 213	1.19	•58	71.8	6.8	11.9
Deltapine 16	1.20	•58	77.6	8.0	13.1
Coker 310	1.27	•61	69.8	6.4	13.4
Paymaster 303	1.16	• 56	75.6	7.8	12.9
Acala SJ-5	1.19	• 61	75.5	7.4	15.3

Table 42.--Central test: Seed data for Bossier City, La.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 55	20.3	3.47	1.23	10.7	4.0
McNair 220 ·····	19.9	3.69	• 91	10.1	4.5
Stoneville 825 ····	19.9	3.53	1.21	11.9	4.0
Stoneville 213	20.1	3.40	1.12	12.1	4.0
Deltapine 16	20.7	3.54	•91	10.0	4.5
Coker 310	20.6	3.61	1.13	10.5	4.0
Paymaster 303	21.3	3.54	•88	10.2	4.5
Acala SJ-5	21.6	3.84	• 80	7.8	4.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Deltapine 55	88.3	104.0	1.047	2.5	9.2
Mc Nair 220	93.9	108.4	1.014	2.5	9.5
Stoneville 825	97.3	111.0	1.032	3.8	10.0
Stoneville 213	97.5	111.2	1.027	1.5	10.0
Deltapine 16	95.5	109.6	1.043	3.0	9.6
Coker 310	94.9	109.1	1.042	2.0	9.9
Paymaster 303	107.4	118.6	1.025	2.5	11.0
Acala SJ-5	104.0	116.0	1.050	0.7	10.7

Table 43.--Central test: Yield, boll, and spinning data for College Station, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
McNair 220	1235 a	5.24	36.0	9.6	4.40
Deltapine 55	1173 ab	4.83	35.9	8.9	4.25
Stoneville 213	1134 abc	5.36	35.6	9.8	4.60
Coker 310	1104 bc	5.49	35.1	9.7	4.50
Stoneville 825	1087 bc	4.70	34.3	9.6	4.45
Deltapine 16	1037 с	5.28	34.0	9.4	4.45
Paymaster 303	896 d	5.88	32.8	11.4	4.50
Acala SJ-5	774 e	5.77	34.7	10.4	4.35
	Span length (i		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
McNair 220	1.18	0.56	68.0	6.5	13.2
Deltapine 55	1.18	•56	71.5	6.5	12.3
Stoneville 213	1.21	•56	69.1	6.9	11.9
Coker 310	1.19	•57	69.5	6.8	12.4
Stoneville 825	1.18	•55	71.1	6.1	12.1
Deltapine 16	1.18	•56	72.4	6.5	12.5
Paymaster 303	1.12	• 55	70.6	6.9	12.8
Acala SJ-5	1.17	•59	68.3	6.2	15.1

Table 44.--Central test: Seed data for College Station, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 220	19.5	3.31	0.89	12.3	4.0
Deltapine 55	17.6	3.39	1.06	13.7	3.0
Stoneville 213	18.6	3.44	1.16	14.3	3.0
Coker 310	19.1	3.44	1.00	13.8	3.5
Stoneville 825	17.4	3.35	1.16	14.0	3.0
Deltapine 16	19.2	3.21	• 96	13.6	4.0
Paymaster 303	19.8	3.39	•85	14.7	3.0
Acala SJ-5	19.9	3.69	• 64	10.4	4.0
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm^3)	area (mm ²)	(g/cm ³)		seed index
McNair 220	94.6	109.0	0.998	2.5	9.4
Deltapine 55	82.6	99.5	1.027	7.0	8.5
Stoneville 213	91.7	110.4	1.030	2.8	9.4
Coker 310	89.6	105.1	1.015	4.3	9.1
Stoneville 825	87.6	103.5	•996	13.3	8.7
Deltapine 16	89.1	104.7	1.044	6.0	9.3
Paymaster 303	106.2	117.7	1.003	4.8	10.6
Acala SJ-5	103.0	115.4	1.022	3.8	10.5

Table 45.--Central test: Yield, boll, and spinning data for Weslaco, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 55	911 a	5.33	41.7	9.1	4.80
Deltapine 16	872 ab	5.38	38.3	9.6	4.45
Stoneville 825	811 ab	5.07	40.0	9.9	5.10
Coker 310	797 abc	5.31	39.3	10.2	4.40
Stoneville 213	792 abc	4.95	39.0	9.3	4.70
Paymaster 303	724 abc	5.55	37.7	10.8	4.15
McNair 220	672 bc	4.81	40.7	9.2	4.85
Acala SJ-5	601 c	6.28	38.4	11.1	4.70
	Span length (i	nches)	Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Deltapine 55	1.08	0.52	70.8	7.7	11.9
Deltapine 16	1.06	•51	72.2	8.0	11.9
Stoneville 825	1.08	•52	70.5	7.7	11.5
Coker 310	1.11	• 52	67.6	7.9	12.0
Stoneville 213	1.05	• 50	68.4	8.1	11.6
Paymaster 303	1.03	•46	70.1	8.1	11.1
McNair 220 ·····	1.02	•49	70.4	8.5	11.5
Acala SJ-5	1.12	•56	69.3	7.3	14.8

Table 46.--Central test: Seed data for Weslaco, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 55	19.8	3.10	1.11	9.5	4.0
Deltapine 16	20.6	3.20	•99	12.0	4.5
Stoneville 825	18.8	3.30	1.07	11.5	4.0
Coker 310	19.2	3.33	• 84	11.4	4.0
Stoneville 213	18.7	3.24	•95	14.3	4.0
Paymaster 303	19.4	3.36	•63	12.4	3.5
McNair 220	19.9	3.30	•78	11.0	4.5
Acala SJ-5	20.2	3.54	• 52	10.2	4.0
	Seed	Seed	Seed	Floaters	Acid-
	volume (mm ³)	surface area (mm ²)	density (g/cm ³)	(percent)	delinted- seed index
Deltapine 55	83.1	99.9	1.021	1.0	8.5
Deltapine 16	86.6	102.7	1.018	5.0	8.8
Stoneville 825	89.7	105.1	1.008	1.0	9.0
Coker 310	88.3	104.1	1.017	2.0	9.0
Stoneville 213	81.8	98.8	•999	3.8	8.2
Paymaster 303	99.5	112.6	•969	6.3	9.6
McNair 220	90.1	95.3	•978	4.5	8.8
Acala SJ-5	103.4	115.6	•994	4.8	10.3

Table 47.--Central test: Yield, boll, and spinning data for Nueces County, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Deltapine 55	707 a	5.12	40.3	8.8	4.95
Mc Nair 220	703 a	5.24	38.6	8.6	4.55
Coker 310	702 a	5.09	39.2	8.6	5.00
Paymaster 303	676 ab	5.51	37.3	9.7	4.55
Deltapine 16	661 ab	5.51	39.5	8.9	4.95
Stoneville 825	610 ab	5.54	38.4	8.8	5.00
Stoneville 213	523 bc	5.17	38.2	8.8	5.45
Acala SJ-5	398 c	6.15	36.4	10.3	4.65
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
Deltapine 55	1.09	0.54	70.7	7.3	12.6
Mc Nair 220	1.02	• 50	70.0	7.2	12.4
Coker 310	1.09	• 52	68.5	7.7	12.0
Paymaster 303	1.04	.49	70.2	7.7	11.3
Deltapine 16	1.08	•51	73.2	7.2	11.9
Stoneville 825	1.09	•55	70.4	7.2	12.0
Stoneville 213	1.05	• 50	69.8	7.7	11.3
Acala SJ-5	1.09	• 55	69.9	7.0	14.6

Table 48.--Central test: Seed data for Nueces County, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Deltapine 55 McNair 220 Coker 310 Paymaster 303 Deltapine 16 Stoneville 825 Stoneville 213	19.0 19.9 19.8 19.8 20.9 18.9	3.26 3.10 3.09 3.32 2.93 3.15 3.12	1.11 .89 1.00 .73 1.01 1.12 1.11	11.5 13.0 13.3 10.8 11.7 13.5 13.4	5.5 4.5 4.5 4.5 5.0 4.5 4.0
Acala SJ-5	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	9.7 Floaters (percent)	Acid- delinted- seed index
Deltapine 55 McNair 220 Coker 310 Paymaster 303 Deltapine 16 Stoneville 825 Stoneville 213 Acala SJ-5	83.1 85.5 79.2 99.5 84.9 87.5 86.8 97.8	99.9 101.8 96.8 112.6 101.3 103.4 102.8 111.4	0.987 .980 1.040 .974 1.033 .981 1.013 1.020	1.0 2.0 0.8 2.5 0.8 1.3 1.0 2.5	8.2 8.4 8.2 9.7 8.8 8.6 8.8

PLAINS REGIONAL COTTON VARIETY TEST

Table 49.--Plains test: Yield, boll, and spinning data by cotton variety

ariety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronair reading
ockett 77	635 a	5.43 fg	35.6 abcd	11.3 de	4.08 gh
aymaster 303	617 ab	5.83 bc	35.4 abcd	11.7 bcd	4.39 def
ioneer PR68	602 abc	5.80 bc	34.7 bcde	12.0 ъ	4.07 hi
estburn M	599 abc	5.69 cde	34.8 bcde	11.4 cde	4.25 fg
amcot 788	598 abc	5.47 defg	34.9 bcde	11.2 de	4.03 hi
amcot Sp 21S	594 abc	5.46 defg	35.9 abc	11.2 de	3.98 i
SA 71	591 abc	5.31 g	34.9 bcde	11.9 bc	4.69 b
aymaster 785	564 abcd	5.62 cdef	36.8 a	11.6 bcd	4.56 bc
oker 5110	553 abcd	5.49 defg	35.9 abc	11.6 bcde	4.19 gh
toneville 213	550 abcd	4.88 h	35.5 abcd	11.0 e	4.43 cde
aymaster 266	536 bcd	5.40 fg	35.3 abcd	11.6 bcde	4.40 ef
unn 119	533 bcd	6.00 ъ	34.3 cde	12.9 a	4.44 cde
estern 44	528 cd	5.42 fg	34.1 de	11.7 bcd	4.11 ghi
oker 310	527 cd	5.45 efg	36.3 ab	11.5 bcde	4.42 cde
eltapine SR2	526 cd	5.28 g	32.2 f	11.4 cde	4.54 bcd
tripper 31A	501 de	4.70 h	33.6 f	11.1 e	4.96 a
ankart LX 571	462 de	6.33 a	34.7 bcde	13.2 a	4.39 def
cala SJ-5	428 e	5.71 cd	36.8 a	11.7 bcd	4.03 hi
	Span length (inches)	Colori	meter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
ockett 77	1.07 e	0.51 efah	73.5 cde	8.9 ef	13.0 cd
ockett 77 ·····	1.07 e	0.51 efgh	73.5 cde	8.9 ef	13.0 cd
aymaster 303	1.08 e	•51 efgh	73.4 cdef	9.4 ab	11.7 ghi
aymaster 303ioneer PR68	1.08 e 1.10 c	•51 efgh •52 de	73.4 cdef 73.8 cd	9.4 ab 8.8 ef	11.7 ghi 12.7 cde:
aymaster 303 ioneer PR68 estburn M	1.08 e 1.10 c 1.08 e	•51 efgh •52 de •49 hi	73.4 cdef 73.8 cd 73.0 defg	9.4 ab 8.8 ef 9.5 a	11.7 ghi 12.7 cde: 11.9 ghi
aymaster 303 ioneer PR68 estburn M amcot 788	1.08 e 1.10 c 1.08 e 1.10 cd	•51 efgh •52 de •49 hi •51 efgh	73.4 cdef 73.8 cd 73.0 defg 74.7 b	9.4 ab 8.8 ef 9.5 a 9.0 de	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c
ioneer PR68 estburn M amcot 788 amcot Sp 21S	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de	.51 efgh .52 de .49 hi .51 efgh .50 fghi	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde	11.7 ghi 12.7 cde 11.9 ghi 13.1 c 11.9 ghi
aymaster 303 ioneer PR68 estburn M amcot 788 amcot Sp 21S	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd	11.7 ghi 12.7 cde 11.9 ghi 13.1 c 11.9 ghi 11.3 ij
aymaster 303 ioneer PR68 estburn M amcot 788 samcot Sp 21S SA 71 aymaster 785	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg	.51 efgh .52 de .49 hi .51 efgh .50 fghi .50 ghi .50 fghi	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc	11.7 ghi 12.7 cde 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh
aymaster 303 ioneer PR68 estburn M amcot 788 amcot Sp 21S SA 71 aymaster 785 oker 5110	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde:
aymaster 303 ioneer PR68 estburn M amcot 788 sA 71 aymaster 785 oker 5110 toneville 213	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a 1.13 b	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi •54 c	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd 73.2 defg	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab 9.3 ab	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde: 12.3 fgh
aymaster 303 ioneer PR68 estburn M amcot 788 SA 71 aymaster 785 oker 5110 toneville 213 aymaster 266	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a 1.13 b 1.04 f	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi •54 c •52 d •52 de	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd 73.2 defg 72.5 g	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab 9.3 ab 9.4 ab	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde: 12.3 fgh 12.5 def
aymaster 303 ioneer PR68 estburn M amcot 788 samcot Sp 21S SA 71 aymaster 785 oker 5110 toneville 213 aymaster 266 aymaster 266	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a 1.13 b 1.04 f 1.14 b	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi •54 c •52 d •52 de •55 bc	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd 73.2 defg 72.5 g 73.0 defg	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab 9.3 ab 9.4 ab 9.0 de	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde: 12.3 fgh 12.5 def 13.8 b
aymaster 303 ioneer PR68 estburn M amcot 788 smcot Sp 21S SA 71 aymaster 785 oker 5110 toneville 213 aymaster 266 aymaster 266 estern 44	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a 1.13 b 1.04 f 1.14 b 1.06 e	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi •54 c •52 d •52 de •55 bc •51 efgh	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd 73.2 defg 72.5 g 73.0 defg 73.5 cde	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab 9.3 ab 9.4 ab 9.0 de 9.2 bcd	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde: 12.3 fgh 12.5 def 13.8 b 12.1 fgh
aymaster 303 ioneer PR68 estburn M amcot 788 samcot Sp 21S SA 71 aymaster 785 oker 5110 toneville 213 aymaster 266 aymaster 266 estern 44 oker 310	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a 1.13 b 1.04 f 1.14 b 1.06 e 1.18 a	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi •54 c •52 d •52 de •55 bc •51 efgh •55 b	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd 73.2 defg 72.5 g 73.0 defg 73.5 cde 72.7 efg	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab 9.4 ab 9.0 de 9.2 bcd 9.4 ab	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde: 12.3 fgh 12.5 def 13.8 b 12.1 fgh 13.0 cde
aymaster 303 ioneer PR68 estburn M amcot 788 SA 71 aymaster 785 oker 5110 toneville 213 aymaster 266 aymaster 266 estern 44 oker 310 eltapine SR2	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a 1.13 b 1.04 f 1.14 b 1.06 e 1.18 a 1.08 de	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi •54 c •52 d •52 d •52 de •55 bc •51 efgh •55 b	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd 73.2 defg 72.5 g 73.0 defg 72.5 g 73.5 cde 72.7 efg 72.5 g	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab 9.3 ab 9.4 ab 9.0 de 9.2 bcd 9.4 ab 9.4 ab	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde: 12.3 fgh 12.5 def 13.8 b 12.1 fgh 13.0 cde 12.4 def;
aymaster 303 ioneer PR68 estburn M amcot 788 smcot Sp 21S symaster 785 oker 5110 toneville 213 aymaster 266 aymaster 266 toneville 213 toneville 213 aymaster 266 tripper 31A	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a 1.13 b 1.04 f 1.14 b 1.06 e 1.18 a 1.08 de 1.01 g	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi •54 c •52 d •52 de •55 bc •51 efgh •55 b •51 defg •49 i	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd 73.2 defg 72.5 g 73.0 defg 72.5 g 73.0 defg 72.7 efg 72.5 g 72.6 fg	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab 9.4 ab 9.4 ab 9.4 ab 9.4 ab 9.4 ab 9.4 ab	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde: 12.3 fgh 12.5 def 13.8 b 12.1 fgh 13.0 cde 12.4 defg 10.9 j
aymaster 303 ioneer PR68 estburn M amcot 788 SA 71 aymaster 785 oker 5110 toneville 213 aymaster 266 aymaster 266 estern 44 oker 310 eltapine SR2	1.08 e 1.10 c 1.08 e 1.10 cd 1.08 de 1.01 fg 1.03 fg 1.17 a 1.13 b 1.04 f 1.14 b 1.06 e 1.18 a 1.08 de	•51 efgh •52 de •49 hi •51 efgh •50 fghi •50 ghi •50 fghi •54 c •52 d •52 d •52 de •55 bc •51 efgh •55 b	73.4 cdef 73.8 cd 73.0 defg 74.7 b 75.8 a 73.1 defg 73.0 defg 73.8 cd 73.2 defg 72.5 g 73.0 defg 72.5 g 73.5 cde 72.7 efg 72.5 g	9.4 ab 8.8 ef 9.5 a 9.0 de 9.0 cde 9.2 bcd 9.3 bc 9.3 ab 9.3 ab 9.4 ab 9.0 de 9.2 bcd 9.4 ab 9.4 ab	11.7 ghi 12.7 cde: 11.9 ghi 13.1 c 11.9 ghi 11.3 ij 12.3 fgh 12.7 cde: 12.3 fgh 12.5 def 13.8 b 12.1 fgh 13.0 cde 12.4 def;

Table 50.--Plains test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Lockett 77 Paymaster 303 Pioneer PR68 Westburn M Tamcot 788 GSA 71 Paymaster 785 Coker 5110 Stoneville 213 Paymaster 266 Dunn 119 Western 44 Coker 310 Deltapine SR2 Stripper 31A	17.8 ef 18.6 bcde 18.4 cdef 18.5 bcdef 19.2 ab 18.6 bcde 18.0 def 18.3 cdef 17.0 g 18.0 ef 18.1 def 18.7 bcd 18.5 bcde 18.9 bc 17.9 ef	3.42 h 3.53 ef 3.56 def 3.66 abcd 3.60 bcde 3.67 abc 3.59 bcdef 3.56 def 3.56 def 3.42 gh 3.49 fgh 3.51 efg 3.71 a 3.61 bcde 3.59 bcdef	0.73 hij .77 fgh .78 fgh .91 abc .83 cdef .81 efgh .82 defg .78 fgh .93 ab .96 a .75 ghi .76 ghi .79 efgh .86 cde .76 fghi .89 bcd	11.3 bc 11.7 b 10.3 cde 8.1 gh 9.4 defg 8.6 fgh 8.8 fgh 9.4 defg 11.8 b 13.9 a 10.5 bcd 11.7 b 8.0 gh 11.6 b 7.6 h 9.8 def	4.1 cde 4.1 cde 5.8 ab 6.7 a 6.4 a 5.2 bc 6.9 a 5.2 bc 3.8 de 3.2 e 4.9 bcd 3.8 de 6.0 ab 3.9 de 6.6 a 6.4 a
Lankart LX 571 Acala SJ-5	17.8 f 19.5 a Seed volume (mm ³)	3.57 cdef 3.68 ab Seed surface area (mm ²)	.67 j .69 ij Seed density (g/cm ³)	8.7 fgh 9.0 efg Floaters (percent)	Acid-delinted-seed index
Tamcot Sp 21S GSA 71 Paymaster 785 Coker 5110 Stoneville 213 Paymaster 266 Dunn 119 Western 44	101.0 efg 105.0 cde 105.1 cde 106.8 cd 98.8 fgh 103.3 def 112.5 b 105.4 cde 97.8 gh 95.7 h 107.3 cd 124.7 a 108.6 bc	113.8 def 116.8 cd 116.8 cd 117.9 c 111.9 fg 115.6 cde 121.8 b 116.9 cd 111.3 fg 109.7 g 118.4 c 130.9 a 119.4 bc	0.984 bcd .979 cd .985 bcd .992 bc .998 abc .996 abc .943 g .980 cd 1.001 ab .981 cd .980 cd .980 cd .981 ef 1.000 ab	5.4 ef 12.5 ab 8.7 bcdef 7.8 cdef 9.8 bcde 9.2 bcdef 6.8 def 7.1 cdef	10.3 defg 11.2 bc 10.3 defg 9.7 gh
Coker 310	99.4 fgh 104.5 cde 98.6 fgh 123.8 a 107.1 cd	112.5 efg	1.014 a .981 de .967 de .949 fg .997 abc	4.8 f	10.1 efgh 10.3 defg 9.5 h 11.7 ab 10.7 cde

Table 51.--Plains test: Yield, boll, and spinning data by test location

Location	Lint yield (lb/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Lamesa, Tex	788 a	5.92 b	35.8 ab	11.1 d	3.77 f
Lubbock, Tex Chickasha (irr.),	715 Ъ	5.37 c	34.3 c	11.6 c	3.80 f
Okla	415 c	6.36 a	34.5 c	12.8 b	5.10 b
Chillicothe, Tex	404 cd	4.50 e	36.5 a	10.2 e	4.41 d
Mangum, Okla	393 d	6.01 b	36.4 a	12.8 b	4.62 c
Halfway, Tex	321 e	4.76 d	33.9 c	10.5 e	3.54 g
Altus, Okla Chickasha (dry),	266 f	5.33 c	34.9 bc	13.1 a	4.16 e
Okla	169 g	5.87 Ъ	34.4 c	11.2 d	5.26 a
	Span length (imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Lamesa, Tex	1.12 a	0.51 d	77.7 a	9.6 bc	12.3 c
Lubbock, Tex Chickasha (irr.),	1.10 c	•51 d	77.6 a	9.7 ab	11.8 d
Okla	1.10 bc	•55 b	73.1 d	8.5 f	13.1 a
Chillicothe, Tex	1.03 e	•48 e	67.5 f	8.7 e	11.6 d
Mangum, Okla	1.13 a	•55 a	73.8 c	9.2 d	12.9 ab
Halfway, Tex	1.09 c	•50 d	76.2 b	9.7 a	12.5 bc
Altus, Okla Chickasha (dry),	1.11 ab	•52 c	70.8 e	8.9 e	12.6 bc
Okla	1.04 d	•52 c	70.4 e	9.4 c	13.0 a

Table 52.--Plains test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Lamesa, Tex Lubbock, Tex	17.7 c	3.29 f	0.86 b	10.3 bc	4.4 e
	18.9 b	3.36 e	.83 bc	10.6 ab	5.2 bc
Chickasha (irr.), Okla Chillicothe, Tex. Mangum, Okla Halfway, Tex	19.5 a	3.39 e	.90 a	11.1 a	3.9 f
	17.9 c	3.85 b	.59 e	8.9 de	5.4 b
	19.1 b	3.55 d	.85 b	9.6 cd	5.4 b
	18.8 b	3.57 d	.83 bc	8.7 e	7.5 a
Altus, Okla Chickasha (dry), Okla	17.9 c 16.9 d	3.68 c 3.90 a	.80 cd	10.7 ab	4.7 de 4.9 cd
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Lamesa, Tex Lubbock, Tex Chickasha (irr.),	105.7 c	117.1 c	0.948 e	13.1 a	10.0 c
	109.1 b	119.7 b	.954 e	11.5 a	10.4 b
Okla	115.3 a	124.2 a	.994 b	7.4 bc	11.4 a
	100.1 e	112.9 e	1.015 a	5.3 c	10.4 b
Mangum, Okla Halfway, Tex Altus, Okla	117.1 a	125.5 a	.994 b	5.7 c	11.6 a
	99.7 e	112.8 e	.978 c	6.0 c	9.7 c
	102.8 d	115.0 d	.968 d	12.4 a	9.9 c
Chickasha (dry), Okla	97.1 f	110.7 f	1.008 a	8.6 b	9.8 c

Table 53.--Plains test: Combined yield, boll, and spinning data for Halfway, Lubbock, and Lamesa, Tex., by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Pioneer PR68	736 a	5.58	35.0	11.3	3.43
Tamcot Sp 21S	729 a	5.45	36.3	10.8	3.50
Paymaster 303	701 ab	5.89	35.9	11.7	3.92
Paymaster 785	670 abc	5.57	36.1	10.9	3.77
GSA 71	663 abcd	5.11	33.5	11.5	4.27
Coker 310	647 abcd	5.29	35.9	10.7	3.85
Tamcot 788	644 abcd	5.21	34.6	10.4	3.47
Lockett 77	641 abcd	5.22	34.5	10.8	3.52
Coker 5110	640 abcd	5.24	35.8	10.9	3.72
Westburn M	624 bcde	5.22	34.9	10.9	3.43
Paymaster 266	587 cdef	5.33	35.8	10.9	4.03
Stripper 31A	568 cdef	4.50	34.5	9.6	3.53
Dunn 119	566 def	6.20	33.4	13.4	4.05
Stoneville 213	562 def	4.85	34.6	10.4	3.90
Western 44	536 ef	5.31	34.1	11.4	3.57
Deltapine SR2	526 ef	5.26	28.9	10.9	3.97
Acala SJ-5	504 f	5.39	36.3	10.5	3.32
Lankart LX 571	400 g	5.71	33.9	12.5	3.40
			.		
	Span length (inches)	Color	rimeter	Yarn
	Span length (inches) 50%	$\frac{\text{Color}}{R_d}$	Hunter's b value	Yarn tenacity (cN/tex)
Pioneer PR68	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Pioneer PR68	1.11	0.48	77.9	Hunter's b value	tenacity (cN/tex)
Tamcot Sp 21S	1.11 1.09	0.48 .49	77.9 79.3	Hunter's b value 9.3 9.2	tenacity (cN/tex) 12.5 11.7
Tamcot Sp 21S Paymaster 303	1.11 1.09 1.09	0.48 .49 .49	77.9 79.3 77.8	Hunter's b value 9.3 9.2 10.0	tenacity (cN/tex) 12.5 11.7 11.5
Tamcot Sp 21S Paymaster 303 Paymaster 785	1.11 1.09 1.09 1.11	0.48 .49 .49	77.9 79.3 77.8 78.0	Hunter's b value 9.3 9.2 10.0 9.4	tenacity (cN/tex) 12.5 11.7 11.5 12.6
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71	1.11 1.09 1.09 1.11 0.98	0.48 .49 .49 .51	77.9 79.3 77.8 78.0 78.5	Hunter's b value 9.3 9.2 10.0 9.4 9.5	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310	1.11 1.09 1.09 1.11 0.98 1.19	50% 0.48 .49 .49 .51 .47 .54	77.9 79.3 77.8 78.0 78.5 76.3	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788	1.11 1.09 1.09 1.11 0.98 1.19 1.11	50% 0.48 .49 .49 .51 .47 .54	77.9 79.3 77.8 78.0 78.5 76.3 76.7	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.5
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77	1.11 1.09 1.09 1.11 0.98 1.19 1.11	50% 0.48 .49 .49 .51 .47 .54 .50 .51	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.6	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.7
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77 Coker 5110	1.11 1.09 1.09 1.11 0.98 1.19 1.11 1.07 1.17	50% 0.48 .49 .49 .51 .47 .54 .50 .51 .53	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.6 9.7	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.5 13.7 12.5
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77 Coker 5110 Westburn M	1.11 1.09 1.09 1.11 0.98 1.19 1.11 1.07 1.17	50% 0.48 .49 .49 .51 .47 .54 .50 .51 .53 .47	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3 77.3	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.6 9.7 9.9	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.7 12.5
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77 Coker 5110 Westburn M Paymaster 266	1.11 1.09 1.09 1.11 0.98 1.19 1.11 1.07 1.17 1.08 1.01	50% 0.48 .49 .49 .51 .47 .54 .50 .51 .53 .47 .49	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3 77.3 76.0 76.7	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.7 9.9 10.2	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.7 12.5 11.4
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77 Coker 5110 Westburn M Paymaster 266 Stripper 31A	1.11 1.09 1.09 1.11 0.98 1.19 1.11 1.07 1.17 1.08 1.01	50% 0.48 .49 .49 .51 .47 .54 .50 .51 .53 .47 .49 .51	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3 77.3 76.0 76.7 76.3	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.7 9.9 10.2 9.8	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.7 12.5 11.2 11.4 11.7
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77 Coker 5110 Westburn M Paymaster 266 Stripper 31A Dunn 119	1.11 1.09 1.09 1.11 0.98 1.19 1.11 1.07 1.17 1.08 1.01 1.10	50% 0.48 .49 .49 .51 .47 .54 .50 .51 .53 .47 .49 .51	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3 76.0 76.7 76.3 76.6	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.7 9.9 10.2 9.8 9.6	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.7 12.5 11.2 11.4 11.7 13.6
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77 Coker 5110 Westburn M Paymaster 266 Stripper 31A Dunn 119 Stoneville 213	1.11 1.09 1.09 1.11 0.98 1.19 1.11 1.07 1.17 1.08 1.01 1.10	50% 0.48 .49 .49 .51 .47 .54 .50 .51 .53 .47 .49 .51 .55 .52	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3 77.3 76.0 76.7 76.3 76.6 77.0	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.7 9.9 10.2 9.8 9.6 9.7	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.5 13.7 12.5 11.2 11.4 11.7 13.6 12.5
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77 Coker 5110 Westburn M Paymaster 266 Stripper 31A Dunn 119 Stoneville 213 Western 44	1.11 1.09 1.09 1.11 0.98 1.19 1.11 1.07 1.17 1.08 1.01 1.10 1.16 1.15 1.09	50% 0.48 .49 .49 .51 .47 .54 .50 .51 .53 .47 .49 .51 .55 .49	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3 77.3 76.0 76.7 76.3 76.7	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.6 9.7 9.9 10.2 9.8 9.6 9.7 9.9	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.7 12.5 11.2 11.4 11.7 13.6 12.5 11.0
Tamcot Sp 21S Paymaster 303 Paymaster 785 GSA 71 Coker 310 Tamcot 788 Lockett 77 Coker 5110 Westburn M Paymaster 266 Stripper 31A Dunn 119 Stoneville 213	1.11 1.09 1.09 1.11 0.98 1.19 1.11 1.07 1.17 1.08 1.01 1.10	50% 0.48 .49 .49 .51 .47 .54 .50 .51 .53 .47 .49 .51 .55 .52	77.9 79.3 77.8 78.0 78.5 76.3 76.7 77.3 77.3 76.0 76.7 76.3 76.6 77.0	Hunter's b value 9.3 9.2 10.0 9.4 9.5 9.8 9.6 9.7 9.9 10.2 9.8 9.6 9.7	tenacity (cN/tex) 12.5 11.7 11.5 12.6 10.0 12.5 13.5 13.7 12.5 11.2 11.4 11.7 13.6 12.5

Table 54.--Plains test: Combined seed data for Halfway, Lubbock, and Lamesa, Tex., by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Pioneer PR68	18.7	3.37	0.83	10.8	6.2
Tamcot Sp 21S	19.3	3.54	•93	8.4	4.8
Paymaster 303	18.8	3.34	•77	11.6	4.3
Paymaster 785	19.0	3.47	•86	8.9	5.5
GSA 71	18.2	3.37	•87	8.8	8.0
Coker 310	18.6	3.46	.84	11.8	4.0
Tamcot 788	19.1	3.41	•86	9.2	6.7
Lockett 77	17.6	3.20	•77	11.6	4.3
Coker 5110	18.7	3.40	•98	11.0	3.8
Westburn M	18.1	3.53	•91	7.7	8.3
Paymaster 266	17.6	3.35	•75	10.7	5.3
Stripper 31A	17.0	3.37	•87	9.9	7.5
Dunn 119	19.1	3.39	•83	11.5	4.3
Stoneville 213	17.4	3.26	1.01	14.2	3.2
Western 44	19.0	3.53	•90	6.8	7.0
Deltapine SR2	19.3	3.43	•75	7.2	8.0
Acala SJ-5	19.3	3.53	•74	9.6	4.1
Lankart LX 571	17.7	3.40	•68	7.8	7.3
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Pioneer PR68	106.0	117.5	0.976	6.4	10.3
Tamcot Sp 21S	102.1	115.0	•990	1.7	10.1
Paymaster 303	108.2	119.1	•971	8.3	10.5
Paymaster 785	107.7	118.8	•971	7.2	10.5
GSA 71	112.2	122.0	•910	19.7	10.2
Coker 310	97.7	111.2	•991	4.3	9.6
Tamcot 788	95.8	109.4	•964	10.4	9.2
Lockett 77	99.8	112.8	• 944	13.9	9.5
Coker 5110	95.9	110.0	•982	6.8	9.4
Westburn M	107.6	118.6	•958	9.8	10.3
Paymaster 266	105.4	117.0	•951	12.2	9.7
Stripper 31A	95.5	109.6	•909	24.6	8.7
Dunn 119	124.5	130.8	•972	5.6	12.1
	94.3	108.7	•967	10.3	9.1
Stoneville 213		10001			
		120.9	976	5.5	10.X
Western 44	110.6	120.9	•976 •963	5•5 9•6	10.8
Stoneville 213 Western 44 Deltapine SR2 Acala SJ-5		120.9 117.4 113.1	•976 •963 •969	5.5 9.6 10.9	10.8 10.2 9.7

Table 55.--Plains test: Combined yield, boll, and spinning data for Chickasha (irrigated and dryland), Altus, and Mangum, Okla., and Chillicothe, Tex., by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Lockett 77 ·····	630 a	5.55	36.3	11.6	4.41
Westburn M	583 ab	5.97	34.7	11.8	4.73
Tamcot 788	570 abc	5.63	35.1	11.7	4.37
Paymaster 303	567 abcd	5.79	35.1	11.8	4.67
GSA 71	549 bcd	5.44	35.7	12.1	4.95
Stoneville 213	542 bcd	4.90	36.0	11.4	4.74
Deltapine SR2	526 bcd	5.29	34.1	11.7	4.89
Western 44	523 bcde	5.49	34.2	11.9	4.44
Pioneer PR68	522 bcde	5.94	34.6	12.4	4.45
Tamcot Sp 21S	513 bcde	5.46	35.7	11.4	4.27
Dunn 119	513 bcde	5.88	34.9	12.6	4.67
Paymaster 266	505 cde	5.45	35.0	12.0	4.60
Coker 5110	501 cde	5.64	35.9	12.0	4.47
Paymaster 785	499 de	5.65	37.2	12.1	5.03
Lankart LX 571 ····	498 de	6.70	35.2	13.7	4.99
Stripper 31A	470 e	4.83	33.1	11.9	5.82
Coker 310	455 e	5.55	36.6	12.0	4.76
Acala SJ-5	382 f	5.91	37.1	12.4	4.46
Acara 55 5					
	Span length (rimeter	Yarn
	Span length (inches) 50%	$\frac{\text{Color}}{R_d}$	Hunter's	tenacity
Lockett 77	2.5%	50%	R_d	Hunter's	tenacity
Lockett 77	1.08	0.52	71.5	Hunter's b value	tenacity (cN/tex)
Westburn M	1.08 1.07	0.52 .51	71.5 71.2	Hunter's b value	tenacity (cN/tex)
Westburn M Tamcot 788	1.08 1.07 1.10	0.52 .51 .52	71.5 71.2 73.5	Hunter's b value 8.6 9.3	tenacity (cN/tex) 12.7 12.3
Westburn M Tamcot 788 Paymaster 303	1.08 1.07 1.10 1.07	0.52 .51 .52 .52	71.5 71.2 73.5 70.7	Hunter's b value 8.6 9.3 8.7 9.1	tenacity (cN/tex) 12.7 12.3 12.9
Westburn M Tamcot 788 Paymaster 303 GSA 71	1.08 1.07 1.10 1.07 1.03	0.52 .51 .52 .52	71.5 71.2 73.5 70.7 69.9	Hunter's b value 8.6 9.3 8.7 9.1 9.0	tenacity (cN/tex) 12.7 12.3 12.9 11.9
Westburn M Tamcot 788 Paymaster 303 GSA 71 Stoneville 213	1.08 1.07 1.10 1.07 1.03 1.12	50% 0.52 .51 .52 .52 .52 .52	71.5 71.2 73.5 70.7 69.9 70.9	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1
Westburn M Tamcot 788 Paymaster 303 GSA 71 Stoneville 213 Deltapine SR2	1.08 1.07 1.10 1.07 1.03 1.12 1.08	50% 0.52 .51 .52 .52 .52 .52 .52	71.5 71.2 73.5 70.7 69.9 70.9	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7
Westburn M	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05	50% 0.52 .51 .52 .52 .52 .52 .52 .52	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7
Westburn M Tamcot 788 Paymaster 303 GSA 71 Stoneville 213 Deltapine SR2 Western 44 Pioneer PR68	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10	50% 0.52 .51 .52 .52 .52 .52 .52 .52 .54	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1 9.1 8.6	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7
Westburn M	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10	50% 0.52 .51 .52 .52 .52 .52 .52 .52 .54 .51	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3 71.3	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1 9.1 8.6 8.9	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7 12.8 12.1
Westburn M	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10 1.08 1.13	50% 0.52 .51 .52 .52 .52 .52 .52 .54 .51 .55	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3 71.3 73.8 70.8	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.1 9.1 8.6 8.9 8.7	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7 12.8 12.1 13.9
Westburn M	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10 1.08 1.13 1.05	50% 0.52 .51 .52 .52 .52 .52 .52 .54 .51 .55 .53	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3 71.3 71.3 73.8 70.8 69.9	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1 8.6 8.9 8.7 8.9	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7 12.8 12.1 13.9 13.2
Westburn M	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10 1.08 1.13 1.05 1.17	50% 0.52 .51 .52 .52 .52 .52 .52 .52 .54 .51 .55 .53 .54	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3 71.3 71.3 71.3	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1 9.1 8.6 8.9 8.7 8.9 9.1	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7 12.8 12.1 13.9 13.2 12.8
Westburn M	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10 1.08 1.13 1.05 1.17 0.98	50% 0.52 .51 .52 .52 .52 .52 .52 .54 .51 .55 .53 .54 .50	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3 71.3 71.3 71.3 71.7	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1 9.1 8.6 8.9 8.7 8.9 9.1	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7 12.8 12.1 13.9 13.2 12.8 12.1
Westburn M	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10 1.08 1.13 1.05 1.17 0.98 1.08	50% 0.52 .51 .52 .52 .52 .52 .52 .54 .51 .55 .53 .54 .50 .52	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3 71.3 71.3 71.7 70.8	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1 9.1 8.6 8.9 8.7 8.9 9.1 9.2 9.1	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7 12.8 12.1 13.9 13.2 12.8 12.1 11.8
Westburn M Tamcot 788 Paymaster 303 GSA 71 Stoneville 213 Deltapine SR2 Western 44 Pioneer PR68 Tamcot Sp 21S Dunn 119 Paymaster 266 Coker 5110 Paymaster 785 Lankart LX 571 Stripper 31A	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10 1.08 1.13 1.05 1.17 0.98 1.08 0.95	50% 0.52 .51 .52 .52 .52 .52 .52 .54 .51 .55 .53 .54 .50 .52 .48	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3 71.3 71.3 71.3 70.8 69.9 71.7 70.0 70.6 70.4	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1 9.1 8.6 8.9 8.7 8.9 9.1 9.2 9.1	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7 12.8 12.1 13.9 13.2 12.8 12.1 11.8 10.4
Westburn M	1.08 1.07 1.10 1.07 1.03 1.12 1.08 1.05 1.10 1.08 1.13 1.05 1.17 0.98 1.08	50% 0.52 .51 .52 .52 .52 .52 .52 .54 .51 .55 .53 .54 .50 .52	71.5 71.2 73.5 70.7 69.9 70.9 70.3 71.3 71.3 71.3 71.7 70.8	Hunter's b value 8.6 9.3 8.7 9.1 9.0 9.0 9.1 9.1 8.6 8.9 8.7 8.9 9.1 9.2 9.1	tenacity (cN/tex) 12.7 12.3 12.9 11.9 12.2 12.1 12.7 12.7 12.8 12.1 13.9 13.2 12.8 12.1 11.8

Table 56.--Plains test: Combined seed data for Chickasha (irrigated and dryland), Altus, and Mangum, Okla., and Chillicothe, Tex., by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Lockett 77	18.0	3.54	0.71	11.2	4.0
Westburn M	18.7	3.73	• 90	8.3	5.7
Tamcot 788	19.3	3.72	• 82	9.5	6.2
Paymaster 303	18.4	3.64	•77	11.8	3.9
GSA 71	18.0	3.72	• 79	8.8	6.2
Stoneville 213	16.7	3.52	• 94	13.7	3.2
Deltapine SR2	18.6	3.72	•77	7.8	5.8
Western 44	18.6	3.82	•72	8.8	5.4
Pioneer PR68	18.3	3.68	• 74	9.9	5.6
Tamcot Sp 21S	18.1	3.75	•73	8.7	5.4
Dunn 119	17.5	3.59	•71	11.7	3.5
Paymaster 266	18.1	3.58	•75	10.4	4.7
Coker 5110	18.0	3.66	• 90	12.2	3.8
Paymaster 785	17.9	3.62	•73	9.7	5.0
Lankart LX 571	17.8	3.67	•67	9.2	6.1
Stripper 31A	18.5	3.72	• 90	9.7	5.7
Coker 310	18.5	3.70	.87	11.5	3.8
Acala SJ-5	19.7	3.77	•67	8.7	3.6
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Lockett 77	101.8	114.3	1.007	7.1	10.2
Westburn M	106.2	117.6	1.012	7.0	10.7
Tamcot 788	100.7	113.4	1.017	5.6	10.2
Paymaster 303	103.1	115.4	•985	8.9	10.1
GSA 71	112.6	121.8	•963	8.2	11.8
Stoneville 213	96.5	110.3	•989	9.5	9.5
Deltapine SR2	103.7	115.8	•992	10.8	10.3
Western 44	107.4	118.5	1.014	8.1	10.9
Pioneer PR68	104.6	116.4	• 990	8.2	10.4
Tamcot Sp 21S	104.0	116.0	1.000	7.7	10.4
Dunn 119	124.8	131.0	• 955	7.5	11.9
Paymaster 266	108.4	119.2	•997	7.5	10.8
Coker 5110	98.9	112.1	1.013	8.5	9.9
Paymaster 785	104.0	115.9	•986	9.6	10.2
Lankart LX 571	127.5	132.8	•966	8.7	12.3
Stripper 31A	100.4	113.2	1.001	9.1	10.0
Coker 310	100.5	113.2	1.028	5.1	10.3
Acala SJ-5	111.3	121.4	1.014	5.1	11.3

Table 57.--Plains test: Yield, boll, and spinning data for Lamesa, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronair reading
Paymaster 785	1093 a	6.10	38.2	10.8	3.90
Pioneer PR68	974 ab	6.01	34.7	11.6	3.75
Westburn M	968 ab	5.90	37.9	10.7	3.55
Tamcot Sp 21S	928 bc	6.15	36.4	11.2	3.70
Coker 310	889 bcd	5.84	35.1	10.8	3.75
Paymaster 303	858 bcde	6.64	35.8	12.0	3.95
ockett 77	840 bcdef	6.56	37.1	11.8	3.75
ker 5110	805 cdef	5.78	36.1	11.1	3.70
Camcot 788	797 cdef	5.88	34.8	10.9	3.65
Ounn 119	769 def	7.15	33.9	14.0	4.25
SSA 71	769 def	5.72	33.9	11.1	4.05
Stoneville 213	709 dei 711 efg	4.98	35.3	10.1	
Western 44		5.65	34.7		3.90
	696 fg			11.9	3.45
Paymaster 266	680 fgh	5.80	36.6	10.6	4.20
Deltapine SR2	672 fgh	5.75	35.8	11.0	3.80
Stripper 31A	662 fgh	4.89	35.2	9.3	3.80
ankart LX 571	556 gh	6.37	34.8	12.8	3.45
Acala SJ-5	540 h	5.51	38.6	9.9	3.25
	Span length (imeter	Yarn
	2.5%	50%	R_{d}	Hunter's b value	tenacity (cN/tex)
Paymaster 785	1.15	0.53	78.4	9.4	12.2
Pioneer PR68				0 0	
TORRET LYOU	1.14	•50	77.6	9.3	12.6
	1.14 1.09	•50 •47	77.6 76.1	9.3 9.7	12.6 11.9
estburn M	1.09	• 47	76.1	9.7	11.9
estburn M	1.09 1.09	• 47 • 47	76.1 79.7	9.7 9.3	11.9 11.5
estburn M amcot Sp 21S oker 310	1.09 1.09 1.21	•47 •47 •54	76.1 79.7 77.7	9.7 9.3 9.6	11.9 11.5 13.1
Camcot Sp 21S Coker 310 Caymaster 303	1.09 1.09 1.21 1.10	•47 •47 •54 •50	76.1 79.7 77.7 78.2	9.7 9.3 9.6 9.9	11.9 11.5 13.1 11.8
estburn M	1.09 1.09 1.21 1.10 1.09	• 47 • 47 • 54 • 50 • 54	76.1 79.7 77.7 78.2 77.3	9.7 9.3 9.6 9.9 9.5	11.9 11.5 13.1 11.8 13.9
Camcot Sp 21S Coker 310 Caymaster 303 Cokett 77 Coker 5110	1.09 1.09 1.21 1.10 1.09	•47 •47 •54 •50 •54	76.1 79.7 77.7 78.2 77.3 78.2	9.7 9.3 9.6 9.9 9.5 9.3	11.9 11.5 13.1 11.8 13.9 13.2
destburn M	1.09 1.09 1.21 1.10 1.09 1.20 1.14	.47 .47 .54 .50 .54 .51	76.1 79.7 77.7 78.2 77.3 78.2 76.0	9.7 9.3 9.6 9.9 9.5 9.3	11.9 11.5 13.1 11.8 13.9 13.2 12.9
Camcot Sp 21S Coker 310 Caymaster 303 Cokett 77 Coker 5110 Camcot 788 Camcot 119	1.09 1.09 1.21 1.10 1.09 1.20 1.14	.47 .47 .54 .50 .54 .51 .50	76.1 79.7 77.7 78.2 77.3 78.2 76.0 76.1	9.7 9.3 9.6 9.9 9.5 9.3 9.8 9.4	11.9 11.5 13.1 11.8 13.9 13.2 12.9
Camcot Sp 21S Coker 310 Caymaster 303 Cokett 77 Coker 5110 Camcot 788 Camcot 788 Camcot 788	1.09 1.09 1.21 1.10 1.09 1.20 1.14 1.18 0.99	• 47 • 47 • 54 • 50 • 54 • 51 • 50 • 56 • 47	76.1 79.7 77.7 78.2 77.3 78.2 76.0 76.1 80.2	9.7 9.3 9.6 9.9 9.5 9.3 9.8 9.4	11.9 11.5 13.1 11.8 13.9 13.2 12.9 13.0
Camcot Sp 21S Coker 310 Caymaster 303 Coker 5110 Camcot 788	1.09 1.09 1.21 1.10 1.09 1.20 1.14 1.18 0.99 1.16	.47 .47 .54 .50 .54 .51 .50 .56 .47	76.1 79.7 77.7 78.2 77.3 78.2 76.0 76.1 80.2 78.0	9.7 9.3 9.6 9.9 9.5 9.3 9.8 9.4 9.4	11.9 11.5 13.1 11.8 13.9 13.2 12.9 13.0 10.2 12.8
camcot Sp 21S coker 310 caymaster 303 cokett 77 coker 5110 camcot 788	1.09 1.09 1.21 1.10 1.09 1.20 1.14 1.18 0.99 1.16 1.11	.47 .47 .54 .50 .54 .51 .50 .56 .47 .51	76.1 79.7 77.7 78.2 77.3 78.2 76.0 76.1 80.2 78.0 78.1	9.7 9.3 9.6 9.9 9.5 9.3 9.8 9.4 9.4 9.6 9.7	11.9 11.5 13.1 11.8 13.9 13.2 12.9 13.0 10.2 12.8 11.9
Camcot Sp 21S Coker 310 Caymaster 303 Coker 5110 Camcot 788 Camcot 788 Camcot 788 Camcot 788 Camcot 788 Caymaster 266 Caymaster 266	1.09 1.09 1.21 1.10 1.09 1.20 1.14 1.18 0.99 1.16 1.11	.47 .47 .54 .50 .54 .51 .50 .56 .47 .51	76.1 79.7 77.7 78.2 77.3 78.2 76.0 76.1 80.2 78.0 78.1 76.2	9.7 9.3 9.6 9.9 9.5 9.3 9.8 9.4 9.4 9.6 9.7 10.3	11.9 11.5 13.1 11.8 13.9 13.2 12.9 13.0 10.2 12.8 11.9
Camcot Sp 21S Coker 310 Caymaster 303 Coker 5110 Camcot 788 Caymaster 266 Caymaster 266	1.09 1.09 1.21 1.10 1.09 1.20 1.14 1.18 0.99 1.16 1.11	.47 .47 .54 .50 .54 .51 .50 .56 .47 .51 .51	76.1 79.7 77.7 78.2 77.3 78.2 76.0 76.1 80.2 78.0 78.1 76.2 76.5	9.7 9.3 9.6 9.9 9.5 9.3 9.8 9.4 9.4 9.6 9.7	11.9 11.5 13.1 11.8 13.9 13.2 12.9 13.0 10.2 12.8 11.9 11.6 12.7
Camcot Sp 21S Coker 310 Caymaster 303 Coker 5110 Camcot 788 Camcot 7	1.09 1.09 1.21 1.10 1.09 1.20 1.14 1.18 0.99 1.16 1.11	.47 .47 .54 .50 .54 .51 .50 .56 .47 .51	76.1 79.7 77.7 78.2 77.3 78.2 76.0 76.1 80.2 78.0 78.1 76.2 76.5 77.2	9.7 9.3 9.6 9.9 9.5 9.3 9.8 9.4 9.4 9.6 9.7 10.3 9.6 9.9	11.9 11.5 13.1 11.8 13.9 13.2 12.9 13.0 10.2 12.8 11.9 11.6 12.7 12.4
Jestburn M Camcot Sp 21S Coker 310 Caymaster 303 Coker 5110 Camcot 788 Camcot 788	1.09 1.09 1.21 1.10 1.09 1.20 1.14 1.18 0.99 1.16 1.11 1.06 1.12	.47 .47 .54 .50 .54 .51 .50 .56 .47 .51 .51	76.1 79.7 77.7 78.2 77.3 78.2 76.0 76.1 80.2 78.0 78.1 76.2 76.5	9.7 9.3 9.6 9.9 9.5 9.3 9.8 9.4 9.4 9.6 9.7	11.9 11.5 13.1 11.8 13.9 13.2 12.9 13.0 10.2 12.8 11.9 11.6 12.7

Table 58.--Plains test: Seed data for Lamesa, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Paymaster 785	19.0	3.43	0.87	8.5	4.0
Pioneer PR68	18.2	3.22	•87	12.7	4.0
Westburn M	17.5	3.36	•85	8.9	5.0
Tamcot Sp 21S	19.2	3.42	•83	8.4	4.0
Coker 310	18.4	3.28	•95	12.2	4.0
Paymaster 303	18.5	3.28	•86	10.8	4.0
Lockett 77	17.9	3.12	• 89	11.5	4.0
Coker 5110	18.4	3.15	•99	10.4	3.0
Tamcot 788	18.4	3.38	•81	9.4	4.0
Dunn 119	18.4	3.32	•86	12.9	3.5
GSA 71	17.5	3.24	1.02	8.9	6.0
Stoneville 213	16.1	3.16	1.02	16.1	2.5
Western 44	17.7	3.43	•79	7.4	6.5
Paymaster 266	17.0	3.24	.76	11.5	5.0
Deltapine SR2	18.1	3.30	•76	8.2	6.0
Stripper 31A	14.9	3.20	• 92	11.4	5.5
Lankart LX 571	15.7	3.32	•68	6.2	4.5
Acala SJ-5	18.5	3.47	•81	9.5	4.0
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm ³)	area (mm ²)	(g/cm ³)		seed index
Paymaster 785	108.6	119.4	0.979	6.8	10.6
Pioneer PR68	107.4	118.6	•984	4.0	10.6
Westburn M	102.4	114.9	•954	13.0	9.8
Tamcot Sp 21S	105.0	116.8	•996	2.3	10.4
Coker 310	96.9	110.8	•993	4.0	9.6
Paymaster 303	114.5	123.7	•963	11.0	11.0
Lockett 77	104.0	116.0	•920	14.8	9.9
Coker 5110	95.6	109.7	•975	9.8	9.3
Tamcot 788	100.9	112.4	•960	11.0	9.7
Dunn 119	129.3	134.2	•969	6.8	12.5
GSA 71	118.5	126.6	•900	20.3	10.7
Stoneville 213	94.5	108.9	•923	11.8	8.7
Western 44	107.6	118.8	•954	10.3	10.3
Paymaster 266	105.1	116.9	•936	13.3	9.8
Deltapine SR2	104.8	116.7	•940	16.5	9.9
Stripper 31A	90.5	105.8	•889	41.3	8.1
Lankart LX 571	119.2	127.1	•892	24.0	10.6
Acala SJ-5	97.8	111.4	•955	14.5	9.3

Table 59.--Plains test: Yield, boll, and spinning data for Altus, Okla.

ariety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronair reading
estburn M	908 a	5.58	33.8	12.5	4.10
amcot 788	865 Ъ	5.40	34.8	13.5	3.85
estern 44	820 bc	5.60	34.3	14.0	4.15
aymaster 266	816 bc	4.78	35.3	12.5	4.20
aymaster 785	813 bcd	5.46	36.1	14.5	4.75
ockett 77	808 bcde	5.04	35.9	12.5	3.80
aymaster 303	800 bcde	5.78	33.8	12.5	3.95
toneville 213	788 bcde	4.32	36.8	12.0	4.10
amcot Sp 21S	786 bcde	5.50	35.6	12.5	3.75
ankart LX 571	771 bcde	6.16	34.4	14.0	4.35
unn 119	749 cde	5.80	34.1	14.0	4.10
tripper 31A	717 cde	4.98	31.5		
	717 cde 714 cde	5.06		13.5	5.00
SA 71			35.6	13.5	4.15
eltapine SR2	710 cde	4.88	32.8	13.0	4.35
oker 310	703 de	4.90	36.2	14.0	4.00
oker 5110	699 e	5.08	34.1	11.5	3.85
ioneer PR68	697 e	5.90	34.3	13.5	3.85
cala SJ-5	535 f	5.78	38.8	13.0	4.50
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
	1 10	0.50	70.0	0.1	10 /
estburn M	1.12	0.52	70.2	9.1	12.4
amcot 788	1.14		1 2 2	X X	12.4
		•53	73.3	8.3	
estern 44	1.08	•53	70.2	9.0	12.7
			70.2 71.2	9.0 8.9	12.7 13.2
estern 44 aymaster 266	1.08	•52	70.2	9.0	12.7
estern 44 aymaster 266 aymaster 785	1.08 1.08	•52 •54	70.2 71.2	9.0 8.9	12.7 13.2
estern 44 aymaster 266 aymaster 785 ockett 77	1.08 1.08 0.99 1.14	•52 •54 •50	70.2 71.2 70.1	9.0 8.9 9.0	12.7 13.2 11.4
aymaster 266 aymaster 785 ockett 77 aymaster 303	1.08 1.08 0.99 1.14 1.12	•52 •54 •50 •52 •51	70.2 71.2 70.1 71.3 70.7	9.0 8.9 9.0 8.7	12.7 13.2 11.4 13.0
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213	1.08 1.08 0.99 1.14 1.12 1.14	•52 •54 •50 •52 •51 •52	70.2 71.2 70.1 71.3 70.7 71.8	9.0 8.9 9.0 8.7 8.6 9.1	12.7 13.2 11.4 13.0 12.2 11.6
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S	1.08 1.08 0.99 1.14 1.12 1.14	• 52 • 54 • 50 • 52 • 51 • 52 • 52	70.2 71.2 70.1 71.3 70.7 71.8 72.7	9.0 8.9 9.0 8.7 8.6 9.1 8.8	12.7 13.2 11.4 13.0 12.2 11.6 12.0
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S ankart LX 571	1.08 1.08 0.99 1.14 1.12 1.14 1.11	•52 •54 •50 •52 •51 •52 •52 •54	70.2 71.2 70.1 71.3 70.7 71.8 72.7 72.1	9.0 8.9 9.0 8.7 8.6 9.1 8.8	12.7 13.2 11.4 13.0 12.2 11.6 12.0
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S ankart LX 571 unn 119	1.08 1.08 0.99 1.14 1.12 1.14 1.11 1.12 1.17	• 52 • 54 • 50 • 52 • 51 • 52 • 52 • 54 • 56	70.2 71.2 70.1 71.3 70.7 71.8 72.7 72.1 70.1	9.0 8.9 9.0 8.7 8.6 9.1 8.8 9.1	12.7 13.2 11.4 13.0 12.2 11.6 12.0 12.0
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S ankart LX 571 tripper 31A	1.08 1.08 0.99 1.14 1.12 1.14 1.11 1.12 1.17 0.96	• 52 • 54 • 50 • 52 • 51 • 52 • 52 • 54 • 56 • 49	70.2 71.2 70.1 71.3 70.7 71.8 72.7 72.1 70.1 69.4	9.0 8.9 9.0 8.7 8.6 9.1 8.8 9.1 8.7	12.7 13.2 11.4 13.0 12.2 11.6 12.0 12.0 14.3 10.9
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S ankart LX 571 bunn 119 stripper 31A SA 71	1.08 1.08 0.99 1.14 1.12 1.14 1.11 1.12 1.17 0.96 1.08	• 52 • 54 • 50 • 52 • 51 • 52 • 52 • 54 • 56 • 49 • 53	70.2 71.2 70.1 71.3 70.7 71.8 72.7 72.1 70.1 69.4 70.2	9.0 8.9 9.0 8.7 8.6 9.1 8.8 9.1 8.7	12.7 13.2 11.4 13.0 12.2 11.6 12.0 12.0 14.3 10.9 12.6
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S ankart LX 571 ounn 119 Stripper 31A eltapine SR2	1.08 1.08 0.99 1.14 1.12 1.14 1.11 1.12 1.17 0.96 1.08 1.11	• 52 • 54 • 50 • 52 • 51 • 52 • 52 • 54 • 56 • 49 • 53 • 52	70.2 71.2 70.1 71.3 70.7 71.8 72.7 72.1 70.1 69.4 70.2 69.7	9.0 8.9 9.0 8.7 8.6 9.1 8.8 9.1 8.7 9.1	12.7 13.2 11.4 13.0 12.2 11.6 12.0 12.0 14.3 10.9 12.6 12.7
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S ankart LX 571 tripper 31A SA 71 eltapine SR2 oker 310	1.08 1.08 0.99 1.14 1.12 1.14 1.11 1.12 1.17 0.96 1.08 1.11	• 52 • 54 • 50 • 52 • 51 • 52 • 52 • 54 • 56 • 49 • 53 • 52 • 53	70.2 71.2 70.1 71.3 70.7 71.8 72.7 72.1 70.1 69.4 70.2 69.7 70.3	9.0 8.9 9.0 8.7 8.6 9.1 8.8 9.1 8.7 9.1 8.7 9.2	12.7 13.2 11.4 13.0 12.2 11.6 12.0 14.3 10.9 12.6 12.7 13.1
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S ankart LX 571 tunn 119 SSA 71 eltapine SR2 oker 310 oker 5110	1.08 1.08 0.99 1.14 1.12 1.14 1.11 1.12 1.17 0.96 1.08 1.11 1.20 1.21	•52 •54 •50 •52 •51 •52 •52 •54 •56 •49 •53 •52 •53 •55	70.2 71.2 70.1 71.3 70.7 71.8 72.7 72.1 70.1 69.4 70.2 69.7 70.3 71.5	9.0 8.9 9.0 8.7 8.6 9.1 8.8 9.1 8.7 9.1 8.7 9.2 9.4	12.7 13.2 11.4 13.0 12.2 11.6 12.0 12.0 14.3 10.9 12.6 12.7 13.1 12.6
aymaster 266 aymaster 785 ockett 77 aymaster 303 toneville 213 amcot Sp 21S ankart LX 571 tripper 31A SA 71 eltapine SR2 oker 310	1.08 1.08 0.99 1.14 1.12 1.14 1.11 1.12 1.17 0.96 1.08 1.11	• 52 • 54 • 50 • 52 • 51 • 52 • 52 • 54 • 56 • 49 • 53 • 52 • 53	70.2 71.2 70.1 71.3 70.7 71.8 72.7 72.1 70.1 69.4 70.2 69.7 70.3	9.0 8.9 9.0 8.7 8.6 9.1 8.8 9.1 8.7 9.1 8.7 9.2	12.7 13.2 11.4 13.0 12.2 11.6 12.0 14.3 10.9 12.6 12.7 13.1

Table 60.--Plains test: Seed data for Altus, Okla.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Westburn M	17.7	3.57	0.99	10.5	6.0
Tamcot 788	18.9	3.73	.88	9.3	6.0
Western 44	18.6	3.84	.79	9.3	6.0
Paymaster 266	18.4	3.59	.76	11.0	4.0
Paymaster 785	17.6	3.57	•73	11.2	5.0
Lockett 77	17.8	3.47	•76	11.2	4.0
Paymaster 303	19.2	3.63	•76	11.2	4.5
Stoneville 213	16.2	3.66	1.05	13.7	3.5
Tamcot Sp 21S	17.7	3.80	• 75	9.9	3.5
Lankart LX 571	17.2	3.67	•59	9.9	6.0
Dunn 119	17.8	3.54	•76	11.6	4.0
Stripper 31A	17.3	3.80	• 84	10.7	5.5
GSA 71	17.0	3.80	•75	9.4	6.0
Deltapine SR2	17.1	3.55	.76	9.2	5.0
Coker 310	18.5	3.82	•86	12.3	4.0
Coker 5110	17.4	3.79	•93	13.8	4.0
Pioneer PR68	17.8	3.64	•82	10.7	4.0
Acala SJ-5	19.8	3.89	•67	8.4	4.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
		112.7	0.990	13.5	9.9
Westburn M	99.6	1 4 0 /	U• フプU		
	99.6 99.7				9.7
Tamcot 788	99.7	112.7	•978	8.5	9.7 9.9
Tamcot 788	99.7 100.3	112.7 113.3	•978 •988	8.5 17.8	9.9
Tamcot 788 Western 44 Paymaster 266	99.7 100.3 104.2	112.7 113.3 116.2	•978 •988 •986	8.5 17.8 11.5	9.9 10.3
Paymaster 785	99.7 100.3 104.2 102.4	112.7 113.3 116.2 114.8	.978 .988 .986 .964	8.5 17.8 11.5 9.3	9.9 10.3 9.9
Paymaster 785 Lockett 77	99.7 100.3 104.2 102.4 99.9	112.7 113.3 116.2	.978 .988 .986 .964 .988	8.5 17.8 11.5 9.3 9.0	9.9 10.3 9.9 9.9
Paymaster 785 Lockett 77 Paymaster 303	99.7 100.3 104.2 102.4 99.9 106.6	112.7 113.3 116.2 114.8 113.0 118.2	.978 .988 .986 .964 .988	8.5 17.8 11.5 9.3 9.0 11.8	9.9 10.3 9.9 9.9 10.3
Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213	99.7 100.3 104.2 102.4 99.9 106.6 89.6	112.7 113.3 116.2 114.8 113.0 118.2 105.1	.978 .988 .986 .964 .988 .963	8.5 17.8 11.5 9.3 9.0 11.8 14.8	9.9 10.3 9.9 9.9 10.3 8.6
Tamcot 788 Western 44 Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213 Tamcot Sp 21S	99.7 100.3 104.2 102.4 99.9 106.6 89.6 97.5	112.7 113.3 116.2 114.8 113.0 118.2 105.1 111.2	.978 .988 .986 .964 .988 .963 .963	8.5 17.8 11.5 9.3 9.0 11.8 14.8	9.9 10.3 9.9 9.9 10.3 8.6 9.5
Tamcot 788 Western 44 Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213 Tamcot Sp 21S Lankart LX 571	99.7 100.3 104.2 102.4 99.9 106.6 89.6 97.5 123.7	112.7 113.3 116.2 114.8 113.0 118.2 105.1 111.2 130.2	.978 .988 .986 .964 .988 .963 .963 .975	8.5 17.8 11.5 9.3 9.0 11.8 14.8 9.8	9.9 10.3 9.9 9.9 10.3 8.6 9.5
Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213 Tamcot Sp 21S Lankart LX 571 Dunn 119	99.7 100.3 104.2 102.4 99.9 106.6 89.6 97.5 123.7 125.3	112.7 113.3 116.2 114.8 113.0 118.2 105.1 111.2 130.2 131.4	.978 .988 .986 .964 .988 .963 .963 .975 .952	8.5 17.8 11.5 9.3 9.0 11.8 14.8 9.8 11.3 5.3	9.9 10.3 9.9 9.9 10.3 8.6 9.5 11.8
Tamcot 788 Western 44 Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213 Tamcot Sp 21S Lankart LX 571 Dunn 119 Stripper 31A	99.7 100.3 104.2 102.4 99.9 106.6 89.6 97.5 123.7 125.3 98.9	112.7 113.3 116.2 114.8 113.0 118.2 105.1 111.2 130.2 131.4 112.3	.978 .988 .986 .964 .988 .963 .963 .975 .952	8.5 17.8 11.5 9.3 9.0 11.8 14.8 9.8 11.3 5.3 21.0	9.9 10.3 9.9 9.9 10.3 8.6 9.5 11.8 11.8
Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213 Tamcot Sp 21S Lankart LX 571 Dunn 119 Stripper 31A	99.7 100.3 104.2 102.4 99.9 106.6 89.6 97.5 123.7 125.3 98.9 112.5	112.7 113.3 116.2 114.8 113.0 118.2 105.1 111.2 130.2 131.4 112.3 122.3	.978 .988 .986 .964 .988 .963 .963 .975 .952 .938 .944	8.5 17.8 11.5 9.3 9.0 11.8 14.8 9.8 11.3 5.3 21.0	9.9 10.3 9.9 9.9 10.3 8.6 9.5 11.8 11.8 9.3
Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213 Tamcot Sp 21S Lankart LX 571 Dunn 119 Stripper 31A Deltapine SR2	99.7 100.3 104.2 102.4 99.9 106.6 89.6 97.5 123.7 125.3 98.9 112.5 100.9	112.7 113.3 116.2 114.8 113.0 118.2 105.1 111.2 130.2 131.4 112.3 122.3 113.7	.978 .988 .986 .964 .988 .963 .963 .975 .952 .938 .944 .900	8.5 17.8 11.5 9.3 9.0 11.8 14.8 9.8 11.3 5.3 21.0 13.0	9.9 10.3 9.9 9.9 10.3 8.6 9.5 11.8 11.8 9.3
Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213 Tamcot Sp 21S Lankart LX 571 Dunn 119 Stripper 31A GSA 71 Deltapine SR2 Coker 310	99.7 100.3 104.2 102.4 99.9 106.6 89.6 97.5 123.7 125.3 98.9 112.5 100.9 93.2	112.7 113.3 116.2 114.8 113.0 118.2 105.1 111.2 130.2 131.4 112.3 122.3 113.7 107.8	.978 .988 .986 .964 .988 .963 .963 .975 .952 .938 .944 .900 .964	8.5 17.8 11.5 9.3 9.0 11.8 14.8 9.8 11.3 5.3 21.0 13.0 17.8 7.5	9.9 10.3 9.9 9.9 10.3 8.6 9.5 11.8 11.8 9.3 10.1 9.7 9.4
Westburn M Tamcot 788 Western 44 Paymaster 266 Paymaster 785 Lockett 77 Paymaster 303 Stoneville 213 Tamcot Sp 21S Lankart LX 571 Dunn 119 Stripper 31A Deltapine SR2 Coker 310 Pioneer PR68	99.7 100.3 104.2 102.4 99.9 106.6 89.6 97.5 123.7 125.3 98.9 112.5 100.9	112.7 113.3 116.2 114.8 113.0 118.2 105.1 111.2 130.2 131.4 112.3 122.3 113.7	.978 .988 .986 .964 .988 .963 .963 .975 .952 .938 .944 .900	8.5 17.8 11.5 9.3 9.0 11.8 14.8 9.8 11.3 5.3 21.0 13.0	9.9 10.3 9.9 9.9 10.3 8.6 9.5 11.8 11.8 9.3

Table 61.--Plains test: Yield, boll, and spinning data for Lubbock, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Tamcot Sp 21S	878 a	5.41	35.7	11.2	3.40
Pioneer PR68	855 ab	5.72	34.7	11.7	3.30
Paymaster 303	812 abc	5.97	35.5	12.1	4.10
Tamcot 788	800 abcd	4.71	32.7	12.2	4.50
GSA 71	795 abcd	5.28	35.4	11.2	3.90
Paymaster 266	794 abcd	5.36	34.9	10.7	3.60
Coker 310	767 bcde	5.38	35.4	11.4	4.00
Coker 5110	760 bcde	5.38	34.7	11.8	3.90
Lockett 77	729 cdef	4.76	33.3	10.3	3.40
Stoneville 213	702 defg	5.15	34.0	11.6	4.30
Acala SJ-5	691 efg	5.71	35.3	11.4	3.45
Stripper 31A	688 efg	4.45	33.8	9.9	3.40
Deltapine SR2	649 fg	5.35	33.2	11.3	4.25
Dunn 119	648 fg	6.15	32.6	14.2	4.20
Paymaster 785	611 g	5.54	35.0	11.6	3.90
Westburn M	605 g	5.12	33.8	11.7	3.50
Western 44	604 g	5.37	33.8	12.1	3.80
Lankart LX 571	470 h	5.92	33.1	13.4	3.50
Lankart LA J/1 ••••				130,	
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Tamcot Sp 21S	1.11	0.50	79.7	9.1	11.0
_	1.11		79.7 79.0	9.1 9.2	11.0 12.0
Pioneer PR68	1.09	• 48	79.0	9.2	12.0
Pioneer PR68 Paymaster 303	1.09 1.07	•48 •47	79.0 78.0	9.2 10.1	12.0 10.6
Pioneer PR68 Paymaster 303 Tamcot 788	1.09 1.07 0.96	•48 •47 •45	79.0 78.0 77.7	9.2 10.1 9.7	12.0 10.6 9.3
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71	1.09 1.07 0.96 0.99	•48 •47 •45 •48	79.0 78.0 77.7 77.4	9.2 10.1 9.7 10.1	12.0 10.6 9.3 11.1
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266	1.09 1.07 0.96 0.99 1.13	• 48 • 47 • 45 • 48 • 52	79.0 78.0 77.7 77.4 78.0	9.2 10.1 9.7 10.1 9.5	12.0 10.6 9.3 11.1 13.6
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310	1.09 1.07 0.96 0.99 1.13 1.18	•48 •47 •45 •48 •52 •53	79.0 78.0 77.7 77.4 78.0 76.6	9.2 10.1 9.7 10.1 9.5 9.8	12.0 10.6 9.3 11.1 13.6 12.4
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110	1.09 1.07 0.96 0.99 1.13 1.18 1.19	• 48 • 47 • 45 • 48 • 52 • 53 • 58	79.0 78.0 77.7 77.4 78.0 76.6 77.5	9.2 10.1 9.7 10.1 9.5 9.8 10.0	12.0 10.6 9.3 11.1 13.6 12.4 11.8
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110 Lockett 77	1.09 1.07 0.96 0.99 1.13 1.18 1.19	.48 .47 .45 .48 .52 .53 .58	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110 Lockett 77 Stoneville 213	1.09 1.07 0.96 0.99 1.13 1.18 1.19 1.05	.48 .47 .45 .48 .52 .53 .58	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4 77.3	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8 9.9	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1 12.3
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110 Lockett 77 Stoneville 213 Acala SJ-5	1.09 1.07 0.96 0.99 1.13 1.18 1.19 1.05 1.14	.48 .47 .45 .48 .52 .53 .58 .50	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4 77.3 76.7	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8 9.9	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1 12.3 14.9
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110 Lockett 77 Stoneville 213 Acala SJ-5 Stripper 31A	1.09 1.07 0.96 0.99 1.13 1.18 1.19 1.05 1.14 1.19	•48 •47 •45 •48 •52 •53 •58 •50 •53 •61 •48	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4 77.3 76.7 77.3	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8 9.9 9.4	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1 12.3 14.9 10.6
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110 Lockett 77 Stoneville 213 Acala SJ-5 Stripper 31A Deltapine SR2	1.09 1.07 0.96 0.99 1.13 1.18 1.19 1.05 1.14 1.19	.48 .47 .45 .48 .52 .53 .58 .50 .53 .61 .48	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4 77.3 76.7 77.3 77.4	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8 9.9 9.4 9.6 10.0	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1 12.3 14.9 10.6 10.0
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Lockett 77 Stoneville 213 Acala SJ-5 Stripper 31A Deltapine SR2 Dunn 119	1.09 1.07 0.96 0.99 1.13 1.18 1.19 1.05 1.14 1.19 1.07 1.08	.48 .47 .45 .48 .52 .53 .58 .50 .53 .61 .48 .49	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4 77.3 76.7 77.3 77.4	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8 9.9 9.4 9.6 10.0 9.8	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1 12.3 14.9 10.6 10.0 14.0
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110 Lockett 77 Stoneville 213 Acala SJ-5 Stripper 31A Deltapine SR2 Dunn 119	1.09 1.07 0.96 0.99 1.13 1.18 1.19 1.05 1.14 1.19 1.07 1.08 1.14	.48 .47 .45 .48 .52 .53 .58 .50 .53 .61 .48 .49	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4 77.3 76.7 77.3 77.4 77.4 77.4	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8 9.9 9.4 9.6 10.0 9.8 9.3	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1 12.3 14.9 10.6 10.0 14.0 12.7
Pioneer PR68 Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110 Lockett 77 Stoneville 213 Acala SJ-5 Stripper 31A Deltapine SR2 Dunn 119 Paymaster 785 Westburn M	1.09 1.07 0.96 0.99 1.13 1.18 1.19 1.05 1.14 1.19 1.07 1.08 1.14 1.10	.48 .47 .45 .48 .52 .53 .58 .50 .53 .61 .48 .49 .53 .50	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4 77.3 76.7 77.3 77.4 77.4 78.2 77.6	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8 9.9 9.4 9.6 10.0 9.8 9.3	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1 12.3 14.9 10.6 10.0 14.0 12.7 11.3
Paymaster 303 Tamcot 788 GSA 71 Paymaster 266 Coker 310 Coker 5110 Lockett 77 Stoneville 213 Acala SJ-5 Stripper 31A Deltapine SR2 Dunn 119 Paymaster 785	1.09 1.07 0.96 0.99 1.13 1.18 1.19 1.05 1.14 1.19 1.07 1.08 1.14	.48 .47 .45 .48 .52 .53 .58 .50 .53 .61 .48 .49	79.0 78.0 77.7 77.4 78.0 76.6 77.5 78.4 77.3 76.7 77.3 77.4 77.4 77.4	9.2 10.1 9.7 10.1 9.5 9.8 10.0 9.8 9.9 9.4 9.6 10.0 9.8 9.3	12.0 10.6 9.3 11.1 13.6 12.4 11.8 13.1 12.3 14.9 10.6 10.0 14.0 12.7

Table 62.--Plains test: Seed data for Lubbock, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Tamcot Sp 21S	19.9	3.45	1.08	9.6	5.0
Pioneer PR68	18.4	3.24	.76	12.0	3.5
Paymaster 303	19.4	3.22	•80	12.9	4.0
Tamcot 788	18.5	3.33	•74	9.0	6.5
GSA 71	17.4	3.38	•71	11.0	6.0
Paymaster 266	19.7	3.30	• 94	10.9	5.5
Coker 310	18.5	3.44	•80	12.7	3.0
Coker 5110	19.3	3.49	• 94	12.3	4.0
Lockett 77	16.5	3.11	•71	12.6	4.5
Stoneville 213	19.0	3.24	1.05	13.9	3.5
Acala SJ-5	19.8	3.49	•67	10.0	3.5
Stripper 31A	17.8	3.33	•78	10.9	6.0
Deltapine SR2	20.4	3.37	• 74	7.4	7.5
Dunn 119	19.6	3.33	•79	12.3	4.0
Paymaster 785	19.4	3.50	• 94	9.4	6.0
Westburn M	18.5	3.49	• 94	8.8	8.0
Western 44	19.8	3.45	1.00	6.6	6.0
Lankart LX 571	18.8	3.43	• 64	8.8	7.0
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	(percent)	delinted-
	(mm ³)	area (mm ²)	(g/cm ³)		seed index
Tamcot Sp 21S	103.9	116.0	0.988	0.8	10.3
Pioneer PR68	108.1	119.1	•965	10.8	10.4
Paymaster 303	110.3	120.7	•970	9.0	10.7
Tamcot 788	106.5	117.7	•907	26.0	9.7
GSA 71	113.9	123.2	• 928	17.8	9.6
Paymaster 266	94.0	108.5	•971	10.0	9.1
Coker 310	108.2	119.1	• 962	6.3	10.4
Coker 5110	101.8	114.4	•993	6.3	10.1
Lockett 77	97.8	111.4	•917	21.8	9.0
Stoneville 213	103.6	115.8	•984	13.2	10.2
Acala SJ-5	102.7	115.1	•967	12.0	9.9
Stripper 31A	100.1	113.1	•892	20.3	8.9
Deltapine SR2	108.4	119.3	•975	8.5	10.6
Dunn 119	130.9	135.3	•971	5.5	12.7
Paymaster 785	111.3	121.3	•954	9.3	10.6
Westburn M	122.1	129.1	•941	11.5	11.5
Western 44	115.2	124.2	•984	3.5	11.3
Lankart LX 571	124.6	130.9	• 920	14.3	11.5

Table 63.--Plains test: Yield, boll, and spinning data for Mangum, Okla.

/ariety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
ockett 77	782 a	6.30	37.7	12.5	4.25
Paymaster 303	688 ab	6.44	37.2	13.0	4.55
Ounn 119	660 abc	6.28	34.1	13.0	4.45
Westburn M	645 abcd	5.82	35.6	12.5	4.70
Pioneer PR68	642 abcd	6.06	37.4	13.5	4.40
Deltapine SR2	635 bcd	5.48	35.6	12.0	4.65
estern 44	583 bcde	5.60	33.9	12.0	4.30
Camcot 788	578 bcdef	5.80	34.7	12.5	4.25
Coker 5110	577 bcdef	6.34	38.6	12.5	4.50
ankart LX 571	571 bcdef	7.30	36.1	15.0	4.85
stoneville 213	570 bcdef	5.82	37.4	12.5	4.60
GSA 71	568 bcdef	5.62	36.6	12.5	5.00
Stripper 31A	559 cdef	5.12	34.4	13.5	6.05
Coker 310	528 cdef	6.38	38.3	12.5	4.65
Paymaster 266	513 def	5.76	36.9	13.0	4.70
Paymaster 785	504 def	5.58	39.3	12.0	4.70
*	448 ef	5.72	35.3	13.0	
Camcot Sp 21S					4.35
Acala SJ-5	437 f	6.76	36.7	12.5	4.15
	Span length (imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Lockett 77	1.14	0.56	73.1	8.8	12.7
Paymaster 303	1.13	•57	72.2	9.7	12.4
ounn 119	1.21	•60	74.2	8.8	14.3
loathurn M	1.09	•52	74.3	9.4	11.6
estbuill M					
	1.17	•60	74.6	8.8	13.5
ioneer PR68				8.8 9.4	13.5 13.3
ioneer PR68	1.12	• 56	73.5	9.4	13.3
ioneer PR68 eltapine SR2 estern 44	1.12 1.06	•56 •52	73.5 72.6	9.4 9.0	13.3 13.1
ioneer PR68 eltapine SR2 estern 44 amcot 788	1.12 1.06 1.12	•56 •52 •52	73.5 72.6 76.3	9.4 9.0 9.2	13.3 13.1 12.6
eltapine SR2 estern 44 amcot 788	1.12 1.06 1.12 1.22	•56 •52 •52 •57	73.5 72.6 76.3 74.1	9.4 9.0 9.2 9.5	13.3 13.1 12.6 13.2
ioneer PR68 eltapine SR2 estern 44 Camcot 788 oker 5110	1.12 1.06 1.12 1.22 1.10	• 56 • 52 • 52 • 57 • 53	73.5 72.6 76.3 74.1 72.5	9.4 9.0 9.2 9.5 9.0	13.3 13.1 12.6 13.2 11.9
Pioneer PR68 Peltapine SR2 Pestern 44 Camcot 788 Coker 5110 Ankart LX 571 Stoneville 213	1.12 1.06 1.12 1.22 1.10 1.16	•56 •52 •52 •57 •53 •55	73.5 72.6 76.3 74.1 72.5 74.5	9.4 9.0 9.2 9.5 9.0 9.5	13.3 13.1 12.6 13.2 11.9 12.2
Pioneer PR68 Peltapine SR2 Jestern 44 Camcot 788 Coker 5110 Lankart LX 571 Stoneville 213 GSA 71	1.12 1.06 1.12 1.22 1.10 1.16 1.08	 56 52 52 57 53 55 54 	73.5 72.6 76.3 74.1 72.5 74.5	9.4 9.0 9.2 9.5 9.0 9.5	13.3 13.1 12.6 13.2 11.9 12.2 11.8
Pioneer PR68 Peltapine SR2 Pestern 44 Camcot 788 Coker 5110 Cankart LX 571 Stoneville 213 SSA 71 Stripper 31A	1.12 1.06 1.12 1.22 1.10 1.16 1.08 0.97	• 56 • 52 • 52 • 57 • 53 • 55 • 54 • 50	73.5 72.6 76.3 74.1 72.5 74.5 72.6 72.9	9.4 9.0 9.2 9.5 9.0 9.5 9.4 9.3	13.3 13.1 12.6 13.2 11.9 12.2 11.8 10.4
coneer PR68 deltapine SR2 destern 44 Camcot 788 doker 5110 cankart LX 571 destern 44 coker 310 coker 310	1.12 1.06 1.12 1.22 1.10 1.16 1.08 0.97 1.25	• 56 • 52 • 52 • 57 • 53 • 55 • 54 • 50 • 63	73.5 72.6 76.3 74.1 72.5 74.5 72.6 72.9 73.3	9.4 9.0 9.2 9.5 9.0 9.5 9.4 9.3	13.3 13.1 12.6 13.2 11.9 12.2 11.8 10.4 13.5
coneer PR68 Cestern 44 Camcot 788 Coker 5110 Cankart LX 571 Coneville 213 Coker 310 Coker 310 Caymaster 266	1.12 1.06 1.12 1.22 1.10 1.16 1.08 0.97 1.25 1.09	• 56 • 52 • 52 • 57 • 53 • 55 • 54 • 50 • 63 • 55	73.5 72.6 76.3 74.1 72.5 74.5 72.6 72.9 73.3 73.1	9.4 9.0 9.2 9.5 9.0 9.5 9.4 9.3 9.3 9.1	13.3 13.1 12.6 13.2 11.9 12.2 11.8 10.4 13.5 13.5
Pioneer PR68 Peltapine SR2 Pestern 44 Camcot 788 Coker 5110 Ankart LX 571 Stoneville 213 Stripper 31A Coker 310 Paymaster 266 Paymaster 785	1.12 1.06 1.12 1.22 1.10 1.16 1.08 0.97 1.25 1.09	• 56 • 52 • 52 • 57 • 53 • 55 • 54 • 50 • 63 • 55 • 52	73.5 72.6 76.3 74.1 72.5 74.5 72.6 72.9 73.3 73.1 73.4	9.4 9.0 9.2 9.5 9.0 9.5 9.4 9.3 9.3 9.1 9.4	13.3 13.1 12.6 13.2 11.9 12.2 11.8 10.4 13.5 13.5
Vestburn M Vioneer PR68 Vestern 44 Vestern 44 Vamcot 788 Vestern 5110 Vankart LX 571 Vestern 5110 Vestern 511	1.12 1.06 1.12 1.22 1.10 1.16 1.08 0.97 1.25 1.09	• 56 • 52 • 52 • 57 • 53 • 55 • 54 • 50 • 63 • 55	73.5 72.6 76.3 74.1 72.5 74.5 72.6 72.9 73.3 73.1	9.4 9.0 9.2 9.5 9.0 9.5 9.4 9.3 9.3 9.1	13.3 13.1 12.6 13.2 11.9 12.2 11.8 10.4 13.5 13.5

Table 64.--Plains test: Seed data for Mangum, Okla.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Lockett 77	18.4	3.38	0.78	11.3	4.5
Paymaster 303	19.5	3.58	.81	12.3	4.0
Dunn 119	17.7	3.44	. 78	12.7	4.0
Westburn M	19.3	3.69	• 97	7.4	6.0
Pioneer PR68	19.7	3.59	• 80	9.5	6.0
Deltapine SR2	19.7	3.48	• 91	7.7	6.0
Western 44	19.4	3.74	•72	8.3	6.0
Tamcot 788	21.0	3.62	1.01	6.0	7.0
Coker 5110	19.6	3.38	1.01	10.8	4.0
Lankart LX 571	18.3	3.52	•78	8.8	6.5
Stoneville 213	16.9	3.30	1.06	14.7	4.0
GSA 71	19.2	3.46	.89	8.2	7.0
Stripper 31A	19.4	3.57	1.03	9.7	6.0
Coker 310	19.3	3.56	• 93	10.1	4.5
Paymaster 266	18.6	3.49	•76	10.2	5.0
Paymaster 785	18.7	3.65	•76	8.8	6.0
Tamcot Sp 21S	19.8	3.73	•76	6.2	6.5
Acala SJ-5	19.9	3.68	•67	9.5	4.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Lockett 77	111.3	121.4	0.988	6.8	11.0
Paymaster 303	112.8	122.5	•997	5.5	11.2
Dunn 119	132.6	136.5	• 945	9.0	12.5
Westburn M	114.5	123.8	1.005	6.0	11.5
Pioneer PR68	121.0	128.4	• 999	3.0	12.1
Deltapine SR2	111.1	121.3	1.004	6.3	11.2
Western 44	118.3	126.5	1.000	7.5	11.8
Tamcot 788	117.1	125.6	1.025	1.3	12.0
Coker 5110	110.6	120.9	1.028	4.0	10.9
Lankart LX 571	138.1	140.2	• 945	10.5	13.0
Stoneville 213	105.3	117.0	•972	7.0	10.2
GSA 71	127.5	132.9	•957	5.8	12.2
Stripper 31A	109.2	119.7	• 988	6.5	10.8
Coker 310	115.2	124.2	1.034	3.0	11.9
Paymaster 266	117.9	126.2	• 975	8.3	11.5
Paymaster 785	116.5	125.1	•983	5.8	11.4
Tamcot Sp 21S	114.4	123.6	1.010	4.8	11.5
Acala SJ-5	114.8	124.0	1.034	1.8	11.9

Table 65.--Plains test: Yield, boll, and spinning data for Chickasha, Okla. (irrigated)

ariety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronair reading
ockett 77	780 a	6.62	35.6	12.5	4.65
SSA 71	753 ab	6.16	33.8	12.5	5.55
aymaster 303	682 bc	6.38	34.6	13.0	5.05
toneville 213	671 bcd	5.32	34.2	12.5	5.30
ioneer PR68	659 cd	6.54	35.0	13.5	4.65
amcot 788	629 cde	5.92	34.0	12.5	4.75
mcot Sp 21S	607 cdef	5.94	35.7	13.0	4.25
ker 5110	585 defg	6.60	35.8	12.5	
estburn M	585 defg	6.73	33.8		5.15
				12.5	5.40
nymaster 266	551 efg	6.30	33.0	13.0	4.75
estern 44	549 efg	6.22	33.7	12.0	4.90
eltapine SR2	544 efg	5.96	33.4	12.0	5.25
inkart LX 571	538 fg	7.30	34.6	15.0	5.60
ymaster 785	534 fg	6.60	36.4	12.0	5.45
ripper 31A	525 fg	5.92	33.7	13.5	6.10
ker 310	506 gh	6.80	34.9	12.5	5.35
ınn 119	503 gh	6.74	32.8	13.0	5.10
eala SJ-5	419 h	6.36	36.9	12.5	4.55
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
ockett 77	1.08	0.52	74.7	8.4	12.3
		•53	71.5	8.5	12.2
SA 71	1.03				
aymaster 303	1.08	• 52	73.7	8.9	12.4
coneville 213	1.12	•54	72.1	8.8	12.3
oneer PR68	1.13	• 56	74.4	7.8	14.0
mcot 788	1.10	•55	75.7	8.3	13.4
mcot Sp 21S	1.11	• 52	75.3	8.6	12.9
ker 5110	1.20	•59	73.8	9.1	12.6
estburn M	1.09	• 52	73.3	9.3	13.6
aymaster 266	1.06	•55	71.6	8.1	13.4
estern 44	1.05	• 52	72.5	8.7	13.1
eltapine SR2	1.13	• 56	72.7	8.6	13.2
ankart LX 571	1.12	• 56	70.6	8.5	11.8
ymaster 785	1.01	• 52	70.8	8.7	12.5
ripper 31A	1.02	•51	73.0	8.5	11.5
oker 310	1.19	•57	72.0	8.7	13.9
	1417				
unn 119	1.14	• 58	73.3	8.1	14.8

Table 66.--Plains test: Seed data for Chickasha, Okla. (irrigated)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Lockett 77	19.2	3.41	0.76	11.6	3.5
GSA 71	19.2	3.44	• 84	10.7	6.0
Paymaster 303	18.4	3.38	• 94	14.0	2.0
Stoneville 213	18.5	3.22	1.02	14.2	2.5
Pioneer PR68	19.8	3.39	•85	10.9	6.5
Tamcot 788	20.3	3.38	• 95	8.8	4.5
Tamcot Sp 21S	18.5	3.35	•91	9.4	3.5
Coker 5110	19.7	3.27	1.06	12.9	3.0
Westburn M	20.8	3.26	1.07	10.6	4.0
Paymaster 266	19.2	3.41	• 93	11.3	4.5
Western 44	19.7	3.55	•79	9.6	3.0
Deltapine SR2	20.0	3.67	•87	9.5	6.0
Lankart LX 571	18.1	3.43	•76	10.5	6.0
Paymaster 785	20.2	3.29	•96	10.9	3.5
Stripper 31A	19.8	3.39	1.04	10.9	5.0
Coker 310	20.2	3.30	•98	12.8	2.5
Dunn 119	19.2	3.50	.79	13.1	2.5
Acala SJ-5,	21.4	3.47	.81	8.9	2.5
	Seed	Seed	Seed	Floaters	Acid-
	volume	surface	density	Floaters (percent)	delinted-
Lockett 77	volume	surface	density		delinted-
Lockett 77	volume (mm ³)	surface area (mm ²)	density (g/cm ³)	(percent)	delinted- seed index
GSA 71	volume (mm ³) 107.3	surface area (mm ²)	density (g/cm ³)	(percent) 6.8	delinted- seed index
	volume (mm ³) 107.3 119.1	surface area (mm ²) 118.4 127.0	density (g/cm ³) 1.010 .959	(percent) 6.8 8.3	delinted- seed index 10.8 11.4
GSA 71	volume (mm ³) 107.3 119.1 108.2	surface area (mm ²) 118.4 127.0 119.1	density (g/cm ³) 1.010 .959 .971	6.8 8.3 11.5	delinted- seed index 10.8 11.4 10.5
GSA 71	volume (mm ³) 107.3 119.1 108.2 104.4	surface area (mm ²) 118.4 127.0 119.1 116.3	density (g/cm ³) 1.010 .959 .971 1.001	6.8 8.3 11.5 7.5	delinted- seed index 10.8 11.4 10.5 10.5
GSA 71	volume (mm ³) 107.3 119.1 108.2 104.4 110.8	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1	density (g/cm ³) 1.010 .959 .971 1.001 .990	6.8 8.3 11.5 7.5 8.0	delinted- seed index 10.8 11.4 10.5 10.5
GSA 71	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016	6.8 8.3 11.5 7.5 8.0 3.3	delinted- seed index 10.8 11.4 10.5 10.5 11.0
GSA 71	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989	6.8 8.3 11.5 7.5 8.0 3.3 7.3	delinted- seed index 10.8 11.4 10.5 10.5 10.9 10.9
GSA 71	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5 116.1	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1 124.9	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989 1.005	6.8 8.3 11.5 7.5 8.0 3.3 7.3	delinted- seed index 10.8 11.4 10.5 10.5 10.9 10.9 10.8 11.7
GSA 71	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5 116.1 120.6	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1 124.9 128.1	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989 1.005 1.013	6.8 8.3 11.5 7.5 8.0 3.3 7.3 3.3 4.0	delinted- seed index 10.8 11.4 10.5 10.5 11.0 10.9 10.8 11.7 12.2
Paymaster 303 Stoneville 213 Pioneer PR68 Tamcot 788 Coker 5110 Westburn M Paymaster 266 Western 44	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5 116.1 120.6 117.9	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1 124.9 128.1 126.0	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989 1.005 1.013 1.006	6.8 8.3 11.5 7.5 8.0 3.3 7.3 3.3 4.0	delinted- seed index 10.8 11.4 10.5 10.5 11.0 10.9 10.8 11.7 12.2 11.8
Paymaster 303 Stoneville 213 Pioneer PR68 Tamcot 788 Coker 5110 Westburn M Paymaster 266 Western 44 Deltapine SR2	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5 116.1 120.6 117.9 119.6	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1 124.9 128.1 126.0 127.4	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989 1.005 1.013 1.006 1.017	6.8 8.3 11.5 7.5 8.0 3.3 7.3 3.3 4.0 4.0 5.0	delinted- seed index 10.8 11.4 10.5 10.5 11.0 10.9 10.8 11.7 12.2 11.8 12.2
Paymaster 303 Stoneville 213 Pioneer PR68 Tamcot 788 Coker 5110 Westburn M Paymaster 266 Western 44 Deltapine SR2 Lankart LX 571	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5 116.1 120.6 117.9 119.6 106.7	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1 124.9 128.1 126.0 127.4 118.1	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989 1.005 1.013 1.006 1.017 .969	6.8 8.3 11.5 7.5 8.0 3.3 7.3 3.3 4.0 4.0 5.0 16.3	delinted- seed index 10.8 11.4 10.5 10.5 11.0 10.9 10.8 11.7 12.2 11.8 12.2 10.4
Paymaster 303 Stoneville 213 Pioneer PR68 Tamcot 788 Coker 5110 Westburn M Paymaster 266 Western 44 Deltapine SR2 Lankart LX 571 Paymaster 785	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5 116.1 120.6 117.9 119.6 106.7 137.5	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1 124.9 128.1 126.0 127.4 118.1 139.8	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989 1.005 1.013 1.006 1.017 .969 .959	6.8 8.3 11.5 7.5 8.0 3.3 7.3 3.3 4.0 4.0 5.0 16.3 10.3	delinted- seed index 10.8 11.4 10.5 10.5 11.0 10.9 10.8 11.7 12.2 11.8 12.2 10.4 13.2 11.4
Paymaster 303 Stoneville 213 Pioneer PR68 Tamcot 788 Coker 5110 Westburn M Paymaster 266 Western 44 Deltapine SR2 Lankart LX 571 Paymaster 785 Stripper 31A	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5 116.1 120.6 117.9 119.6 106.7 137.5 116.3 106.4	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1 124.9 128.1 126.0 127.4 118.1 139.8 125.0 117.8	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989 1.005 1.013 1.006 1.017 .969 .959 .983 1.022	6.8 8.3 11.5 7.5 8.0 3.3 7.3 3.3 4.0 4.0 5.0 16.3 10.3 6.8 8.8	delinted- seed index 10.8 11.4 10.5 10.5 11.0 10.9 10.8 11.7 12.2 11.8 12.2 10.4 13.2 11.4 10.8
Paymaster 303 Stoneville 213 Pioneer PR68 Tamcot 788 Coker 5110 Westburn M Paymaster 266 Western 44 Deltapine SR2 Lankart LX 571 Paymaster 785	volume (mm ³) 107.3 119.1 108.2 104.4 110.8 107.2 109.5 116.1 120.6 117.9 119.6 106.7 137.5 116.3	surface area (mm ²) 118.4 127.0 119.1 116.3 121.1 118.4 120.1 124.9 128.1 126.0 127.4 118.1 139.8 125.0	density (g/cm ³) 1.010 .959 .971 1.001 .990 1.016 .989 1.005 1.013 1.006 1.017 .969 .959 .983	6.8 8.3 11.5 7.5 8.0 3.3 7.3 3.3 4.0 4.0 5.0 16.3 10.3 6.8	delinted- seed index 10.8 11.4 10.5 10.5 11.0 10.9 10.8 11.7 12.2 11.8 12.2 11.4

Table 67.--Plains test: Yield, boll, and spinning data for Chillicothe, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Tamcot 788	483 a	5.17	36.2	9.8	4.25
Lockett 77	480 a	4.03	36.3	10.0	4.15
Tamcot Sp 21S	463 ab	4.46	38.1	9.6	4.15
Pioneer PR68	440 abc	4.94	36.4	10.1	4.35
Stoneville 213	438 abc	4.17	36.7	9.4	4.50
Westburn M	437 abc	5.18	36.1	10.8	4.20
GSA 71	426 abc	4.07	38.4	9.8	4.55
Deltapine SR2	423 abc	4.30	35.0	10.2	4.45
Dunn 119	408 abc	4.37	35.8	11.4	4.25
Western 44	407 abc	4.35	35.0	11.2	4.25
Paymaster 303	406 abc	4.40	36.5	9.8	4.35
Paymaster 266	392 bc	4.75	35.7	10.4	4.40
Paymaster 785	390 bc	4.59	38.7	9.9	4.65
Coker 5110	384 с	4.12	36.5	9.4	4.10
Lankart LX 571	373 cd	5.62	36.2	12.0	4.50
Coker 310	316 de	4.37	37.6	10.0	4.55
Acala SJ-5	308 de	4.71	37.3	11.0	4.35
Stripper 31A	297 е	3.44	34.4	9.1	5.35
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Tamcot 788	1.05	0.48	68.4	8.8	13.2
Lockett 77	1.00	•45	68.4	8.1	12.8
Tamcot Sp 21S	1.03	• 47	72.2	9.0	10.9
Pioneer PR68	1.02	•46	68.6	8.7	10.7
Stoneville 213	1.07	•49	65.2	8.1	11.2
TT - 4-1 24	1.01	•45	67.7	9.1	11.3
westburn M	1 4 0 1	•42	0/ • /	2 Y W	
Westburn M GSA 71	0.96	•47	67.4	8.9	11.4
GSA 71					
GSA 71 Deltapine SR2	0.96 1.02	• 47	67.4	8.9	11.4
GSA 71 Deltapine SR2 Dunn 119	0.96 1.02 1.06	•47 •48	67.4 65.7	8.9 9.1	11.4 11.7
GSA 71 Deltapine SR2 Dunn 119 Western 44	0.96 1.02	•47 •48 •49	67.4 65.7 66.2	8.9 9.1 8.6	11.4 11.7 12.0
GSA 71 Deltapine SR2 Dunn 119 Western 44 Paymaster 303	0.96 1.02 1.06 1.01 1.03	•47 •48 •49	67.4 65.7 66.2 69.3	8.9 9.1 8.6 9.1	11.4 11.7 12.0 10.7
GSA 71 Deltapine SR2 Dunn 119 Western 44 Paymaster 303 Paymaster 266	0.96 1.02 1.06 1.01 1.03 0.98	• 47 • 48 • 49 • 49	67.4 65.7 66.2 69.3 66.7	8.9 9.1 8.6 9.1 8.6	11.4 11.7 12.0 10.7 10.5
GSA 71 Deltapine SR2 Dunn 119 Western 44 Paymaster 303 Paymaster 266 Paymaster 785	0.96 1.02 1.06 1.01 1.03 0.98 0.94	.47 .48 .49 .49 .49	67.4 65.7 66.2 69.3 66.7 65.6	8.9 9.1 8.6 9.1 8.6 8.5	11.4 11.7 12.0 10.7 10.5 11.7
GSA 71 Deltapine SR2 Dunn 119 Western 44 Paymaster 303 Paymaster 266 Paymaster 785 Coker 5110	0.96 1.02 1.06 1.01 1.03 0.98 0.94 1.10	.47 .48 .49 .49 .49 .48 .46	67.4 65.7 66.2 69.3 66.7 65.6 66.6	8.9 9.1 8.6 9.1 8.6 8.5 9.1	11.4 11.7 12.0 10.7 10.5 11.7
GSA 71 Deltapine SR2 Dunn 119 Western 44 Paymaster 303 Paymaster 266 Paymaster 785 Coker 5110 Lankart LX 571	0.96 1.02 1.06 1.01 1.03 0.98 0.94 1.10	.47 .48 .49 .49 .49 .48 .46 .47	67.4 65.7 66.2 69.3 66.7 65.6 66.6	8.9 9.1 8.6 9.1 8.6 8.5 9.1 8.5	11.4 11.7 12.0 10.7 10.5 11.7 11.4
GSA 71 Deltapine SR2 Dunn 119 Western 44 Paymaster 303 Paymaster 266 Paymaster 785 Coker 5110	0.96 1.02 1.06 1.01 1.03 0.98 0.94 1.10	.47 .48 .49 .49 .49 .48 .46	67.4 65.7 66.2 69.3 66.7 65.6 66.6 66.8	8.9 9.1 8.6 9.1 8.6 8.5 9.1 8.5 9.5	11.4 11.7 12.0 10.7 10.5 11.7 11.4 12.1

Table 68.--Plains test: Seed data for Chillicothe, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Tamcot 788	18.8	3.86	0.54	12.7	6.0
Lockett 77	17.4	3.75	• 54	10.3	4.0
Tamcot Sp 21S	17.7	3.95	• 50	10.5	6.0
Pioneer PR68	17.9	3.79	• 52	9.7	5.5
Stoneville 213	16.3	3.71	•66	12.3	3.5
Westburn M	18.4	4.05	•65	4.5	6.5
GSA 71	17.7	3.89	•66	8.0	6.0
Deltapine SR2	18.9	3.90	•59	6.2	6.0
Dunn 119	16.7	3.70	• 48	11.0	4.0
Western 44	18.7	3.99	•63	8.2	6.0
Paymaster 303	18.0	3.84	•56	10.9	5.0
Paymaster 266	18.1	3.72	• 60	6.9	6.0
Paymaster 785	17.5	3.76	• 54	5.6	6.0
Coker 5110	17.3	3.94	•65	10.9	4.5
Lankart LX 571	17.6	3.79	•52	7.7	6.0
Coker 310	18.2	3.90	•79	9.5	5.0
Acala SJ-5	18.8	3.89	• 56	7.6	4.5
Stripper 31A	18.3	3.96	•68	8.0	6.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Tamcot 788	93.2	107.9	1.031	5.0	9.6
Lockett 77 · · · · · ·	97.7	111.4	1.035	4.0	10.1
Tamcot Sp 21S	101.3	114.1	1.014	4.0	10.3
Pioneer PR68	95.2	109.4	1.031	6.0	9.8
Stoneville 213	91.5	106.6	1.004	6.0	9.2
Westburn M	104.5	116.3	1.012	4.0	10.6
GSA 71	102.1	112.1	1.001	6.8	15.1
Deltapine SR2	100.8	113.7	1.016	5.0	10.2
	111.6	121.7	•955	10.0	10.7
Dunn 119	1110				
			1.054	2.8	10.5
Dunn 119 Western 44 Paymaster 303	99.9	112.9	1.054 .989	2.8 10.3	10.5 9.3
Western 44 Paymaster 303	99.9 94.1	112.9 108.5	•989	10.3	9.3
Western 44 Paymaster 303 Paymaster 266	99.9 94.1 107.1	112.9 108.5 118.3	•989 1•020	10.3 3.5	9.3 10.9
Western 44 Paymaster 303 Paymaster 266 Paymaster 785	99.9 94.1 107.1 99.2	112.9 108.5 118.3 112.5	.989 1.020 1.020	10.3 3.5 4.3	9.3 10.9 10.1
Western 44 Paymaster 303 Paymaster 266 Paymaster 785 Coker 5110	99.9 94.1 107.1 99.2 88.5	112.9 108.5 118.3 112.5 104.2	.989 1.020 1.020 1.025	10.3 3.5 4.3 5.8	9.3 10.9 10.1 9.1
Western 44 Paymaster 303 Paymaster 266 Paymaster 785 Coker 5110 Lankart LX 571	99.9 94.1 107.1 99.2 88.5 122.1	112.9 108.5 118.3 112.5 104.2 129.1	.989 1.020 1.020 1.025 .978	10.3 3.5 4.3 5.8 5.8	9.3 10.9 10.1 9.1 11.9
Western 44 Paymaster 303 Paymaster 266	99.9 94.1 107.1 99.2 88.5	112.9 108.5 118.3 112.5 104.2	.989 1.020 1.020 1.025	10.3 3.5 4.3 5.8	9.3 10.9 10.1 9.1

Table 69.--Plains test: Yield, boll, and spinning data for Halfway, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Paymaster 303	432 a	5.08	36.4	11.0	3.70
GSA 71	421 ab	4.90	33.9	11.3	4.25
Tamcot Sp 21S	383 abc	4.80	36.9	10.1	3.40
Pioneer PR68	381 abc	5.03	35.8	10.7	3.25
Coker 5110	357 bcd	4.57	36.7	10.0	3.55
Lockett 77	357 bcd	4.34	33.2	10.3	3.40
Stripper 31A	356 bcd	4.17	34.4	9.8	3.40
Tamcot 788	341 cde	4.41	34.0	9.6	3.15
Western 44	310 def	4.91	33.7	11.2	3.45
Paymaster 785	308 def	5.07	35.1	10.5	3.50
Westburn M	298 def	4.64	33.2	10.2	3.25
Paymaster 266	288 def	4.92	35.6	10.8	4.00
Coker 310	285 ef	4.64	37.4	10.0	3.80
Dunn 119	282 ef	5.32	33.9	12.0	3.70
Acala SJ-5	280 ef	4.94	35.0	10.4	3.25
Stoneville 213	272 ef	4.41	34.4	9.7	3.50
Deltapine SR2	257 f	4.70	17.8	10.4	3.85
Lankart LX 571	175 g	4.85	33.9	11.3	3.25
	Span length (inches)	Color	imeter	Yarn
	0 60/	F 0.9/	D -	77	
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Paymaster 303		0.49	77.2		
Paymaster 303 GSA 71	1.10	0.49	77.2	<i>b</i> value	(cN/tex)
GSA 71	1.10 0.99	0.49	77 . 2 77 . 7	b value 10.1 9.6	(cN/tex) 12.1 10.6
GSA 71	1.10 0.99 1.06	0.49 .48 .49	77.2 77.7 78.4	b value 10.1 9.6 9.4	(cN/tex) 12.1
GSA 71	1.10 0.99 1.06 1.09	0.49 .48 .49 .48	77.2 77.7 78.4 77.1	10.1 9.6 9.4 9.3	12.1 10.6 12.7 13.0
GSA 71	1.10 0.99 1.06 1.09 1.13	0.49 .48 .49 .48	77.2 77.7 78.4 77.1 76.2	10.1 9.6 9.4 9.3 9.7	12.1 10.6 12.7 13.0 12.6
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06	0.49 .48 .49 .48 .51	77.2 77.7 78.4 77.1 76.2 76.4	10.1 9.6 9.4 9.3 9.7 9.5	12.1 10.6 12.7 13.0 12.6 14.2
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11	0.49 .48 .49 .48 .51 .51	77.2 77.7 78.4 77.1 76.2 76.4 74.4	b value 10.1 9.6 9.4 9.3 9.7 9.5 9.9	12.1 10.6 12.7 13.0 12.6 14.2 12.2
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11	0.49 .48 .49 .48 .51 .51	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1	10.1 9.6 9.4 9.3 9.7 9.5 9.9	12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11 1.07	0.49 .48 .49 .48 .51 .51 .52 .47	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1 76.2	b value 10.1 9.6 9.4 9.3 9.7 9.5 9.9 9.6 9.6	12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0 10.6
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11 1.07 1.06 1.09	0.49 .48 .49 .48 .51 .51 .52 .47 .47	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1 76.2 77.3	10.1 9.6 9.4 9.3 9.7 9.5 9.9 9.6 9.6	12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0 10.6 12.9
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11 1.07 1.06 1.09	0.49 .48 .49 .48 .51 .51 .52 .47 .47 .49 .46	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1 76.2 77.3 74.5	b value 10.1 9.6 9.4 9.3 9.7 9.5 9.9 9.6 9.6 9.4 10.4	12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0 10.6 12.9 10.4
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11 1.07 1.06 1.09 1.06	0.49 .48 .49 .48 .51 .51 .52 .47 .47 .49 .46	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1 76.2 77.3 74.5 76.4	10.1 9.6 9.4 9.3 9.7 9.5 9.9 9.6 9.4 10.4 10.3	(cN/tex) 12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0 10.6 12.9 10.4 11.7
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11 1.07 1.06 1.09 1.06 1.01	0.49 .48 .49 .48 .51 .51 .52 .47 .47 .49 .46 .48	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1 76.2 77.3 74.5 76.4	b value 10.1 9.6 9.4 9.3 9.7 9.5 9.9 9.6 9.6 9.4 10.4 10.3 10.0	(cN/tex) 12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0 10.6 12.9 10.4 11.7 11.9
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11 1.07 1.06 1.09 1.06 1.01 1.18	0.49 .48 .49 .48 .51 .51 .52 .47 .47 .49 .46 .48	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1 76.2 77.3 74.5 76.4 74.5	10.1 9.6 9.4 9.3 9.7 9.5 9.9 9.6 9.6 9.4 10.4 10.3 10.0 9.8	12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0 10.6 12.9 10.4 11.7 11.9 13.9
GSA 71	1.10 0.99 1.06 1.09 1.13 1.06 1.11 1.07 1.06 1.09 1.06 1.01 1.18 1.17	0.49 .48 .49 .48 .51 .51 .52 .47 .47 .49 .46 .48 .55 .55	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1 76.2 77.3 74.5 76.4 74.5 76.5 77.8	10.1 9.6 9.4 9.3 9.7 9.5 9.9 9.6 9.4 10.4 10.3 10.0 9.8 9.3	12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0 10.6 12.9 10.4 11.7 11.9 13.9 15.5
Paymaster 303 GSA 71 Tamcot Sp 21S Pioneer PR68 Coker 5110 Lockett 77 Stripper 31A Tamcot 788 Western 44 Paymaster 785 Westburn M Paymaster 266 Coker 310 Dunn 119 Stoneville 213 Deltapine SR2	1.10 0.99 1.06 1.09 1.13 1.06 1.11 1.07 1.06 1.09 1.06 1.01 1.18	0.49 .48 .49 .48 .51 .51 .52 .47 .47 .49 .46 .48	77.2 77.7 78.4 77.1 76.2 76.4 74.4 76.1 76.2 77.3 74.5 76.4 74.5	10.1 9.6 9.4 9.3 9.7 9.5 9.9 9.6 9.6 9.4 10.4 10.3 10.0 9.8	12.1 10.6 12.7 13.0 12.6 14.2 12.2 14.0 10.6 12.9 10.4 11.7 11.9 13.9

Table 70.--Plains test: Seed data for Halfway, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Paymaster 303	18.5	3.52	0.66	11.1	5.0
GSA 71	18.6	3.53	• 86	8.4	11.5
Tamcot Sp 21S	18.9	3.75	•88	7.0	5.5
Pioneer PR68	19.5	3.66	•87	7.7	11.0
Coker 5110	18.6	3.57	1.03	10.4	4.5
Lockett 77	18.5	3.39	•71	10.5	4.5
Stripper 31A	18.3	3.59	•91	7.3	11.0
Tamcot 788	19.1	3.54	. 84	7.3	10.5
Western 44	19.5	3.72	•91	6.3	8.5
Paymaster 785	18.7	3.49	• 78	8.9	6.5
Westburn M	18.4	3.75	• 96	5.5	12.0
Paymaster 266	18.6	3.43	•78	9.5	5.0
Coker 310	19.1	3.66	•79	10.5	5.0
Dunn 119	19.5	3.52	• 85	9.4	5.5
Acala SJ-5	19.6	3.63	•74	9.3	5.0
Stoneville 213	17.3	3.37	• 95	12.7	3.5
Deltapine SR2	19.5	3.62	•75	6.1	10.5
Lankart LX 571	18.6	3.47	• 72	8.5	10.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Paymaster 303	99.9	113.0	0.979	4.8	9.8
GSA 71	111.8	121.8	•923	12.8	10.3
Tamcot Sp 21S	97.5	112.1	•985	2.0	9.6
Pioneer PR68	102.5	115.0	•979	4.5	10.0
Coker 5110	90.5	105.8	•979	4.3	8.9
Lockett 77	97.6	111.2	•996	5.3	9.7
Stripper 31A	95.9	110.0	•947	12.3	9.1
Tamcot 788	92.6	107.4	•964	10.3	8.9
Western 44	108.9	119.7	•992	2.8	10.8
Paymaster 785	103.4	115.6	•981	5.5	10.1
Westburn M	98.3	111.8	•980	4.8	9.6
Paymaster 266	97.2	111.0	•989	5.5	9.6
Coker 310	88.0	103.8	1.018	2.5	8.9
Dunn 119	113.4	123.0	•979	4.5	11.1
Acala SJ-5	99.7	112.8	• 984	6.3	9.8
Stoneville 213	85.0	101.4	• 904	6.1	8.5
	104.4	116.3	• 974	3.8	10.2
Doltaning CD7	1 () () ()		a 7 / 4	.3 4 ()	1004
Deltapine SR2 Lankart LX 571	109.0	119.7	•955	11.3	10.4

Table 71.--Plains test: Yield, boll, and spinning data for Chickasha, Okla. (dryland)

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Westburn M	342 a	6.56	34.2	10.5	5.25
Deltapine SR2	316 ab	5.84	33.8	11.5	5.75
Lockett 77	302 abc	5.76	36.1	10.5	5.20
Tamcot 788	297 abc	5.84	35.8	10.0	4.75
GSA 71	285 abcd	6.28	34.3	12.0	5.50
Coker 5110	260 bcd	6.04	34.8	14.0	4.75
Paymaster 303	260 bcde	5.94	33.6	10.5	5.45
Tamcot Sp 21S	259 bcde	5.70	34.0	9.0	4.85
Paymaster 785	256 bcde	6.00	35.6	12.0	5.60
Western 44	256 bcde	5.70	33.9	10.5	4.60
Paymaster 266	251 bcde	5.64	34.1	11.0	5.05
Stripper 31A	249 bcde	4.68	31.6	10.0	6.60
Dunn 119 · · · · · · · · ·	248 bcde	6.22	37.5	11.5	5.45
Stoneville 213	245 cde	4.88	35.1	10.5	5.20
Lankart LX 571	239 cdef	7.10	34.5	12.5	
					5.65
Coker 310	220 def	5.30	36.0	11.0	5.25
Acala SJ-5	210 ef	5.92	35.7	13.0	4.75
Pioneer PR68	171 f	6.24	29.8	11.5	5.00
	Span length (imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Westburn M	1.07	0.54	70.7	9.6	12.6
Deltapine SR2	1.01	• 51	70.1	9.3	12.7
_	1.01	•51 •51	70.1 68.7	9.3 8.6	12.7 12.1
Lockett 77	1.03	•51	68.7	8.6	12.1
Lockett 77	1.03 1.07	•51 •51	68.7 73.6	8.6 9.0	12.1 13.1
Lockett 77	1.03 1.07 1.02	•51 •51 •52	68.7 73.6 67.7	8.6 9.0 9.8	12.1 13.1 12.9
Lockett 77 Famcot 788 GSA 71 Coker 5110	1.03 1.07 1.02 1.13	•51 •51 •52 •53	68.7 73.6 67.7 72.3	8.6 9.0 9.8 9.6	12.1 13.1 12.9 13.6
Cockett 77 Famcot 788 GSA 71 Coker 5110 Paymaster 303	1.03 1.07 1.02 1.13 1.02	• 51 • 51 • 52 • 53 • 51	68.7 73.6 67.7 72.3 70.3	8.6 9.0 9.8 9.6 9.8	12.1 13.1 12.9 13.6 12.2
Coker 5110 Paymaster 303 Tamcot Sp 21S	1.03 1.07 1.02 1.13 1.02 1.04	.51 .51 .52 .53 .51	68.7 73.6 67.7 72.3 70.3 72.0	8.6 9.0 9.8 9.6 9.8 9.4	12.1 13.1 12.9 13.6 12.2 12.1
Cockett 77 Flamcot 788 GSA 71 Coker 5110 Paymaster 303 Flamcot Sp 21S Paymaster 785	1.03 1.07 1.02 1.13 1.02 1.04 0.96	• 51 • 52 • 53 • 51 • 53 • 50	68.7 73.6 67.7 72.3 70.3 72.0 69.0	8.6 9.0 9.8 9.6 9.8 9.4 10.0	12.1 13.1 12.9 13.6 12.2 12.1
Coker 5110 Paymaster 303 Paymaster 785 Paymaster 44	1.03 1.07 1.02 1.13 1.02 1.04 0.96 1.05	.51 .51 .52 .53 .51 .53 .50	68.7 73.6 67.7 72.3 70.3 72.0 69.0 71.9	8.6 9.0 9.8 9.6 9.8 9.4 10.0 9.8	12.1 13.1 12.9 13.6 12.2 12.1 12.6 14.2
Cokett 77 Famcot 788 GSA 71 Coker 5110 Paymaster 303 Famcot Sp 21S Paymaster 785 Western 44 Paymaster 266	1.03 1.07 1.02 1.13 1.02 1.04 0.96 1.05 1.04	• 51 • 52 • 53 • 51 • 53 • 50 • 55 • 54	68.7 73.6 67.7 72.3 70.3 72.0 69.0 71.9 68.2	8.6 9.0 9.8 9.6 9.8 9.4 10.0 9.8	12.1 13.1 12.9 13.6 12.2 12.1 12.6 14.2
Tamcot 788 GSA 71 Coker 5110 Paymaster 303 Tamcot Sp 21S Paymaster 785 Western 44 Paymaster 266 Stripper 31A	1.03 1.07 1.02 1.13 1.02 1.04 0.96 1.05 1.04 0.91	.51 .51 .52 .53 .51 .53 .50 .55 .54	68.7 73.6 67.7 72.3 70.3 72.0 69.0 71.9 68.2 69.3	8.6 9.0 9.8 9.6 9.8 9.4 10.0 9.8	12.1 13.1 12.9 13.6 12.2 12.1 12.6 14.2 14.0 9.7
Lockett 77 Tamcot 788 GSA 71 Coker 5110 Paymaster 303 Tamcot Sp 21S Paymaster 785 Western 44 Paymaster 266 Stripper 31A Dunn 119	1.03 1.07 1.02 1.13 1.02 1.04 0.96 1.05 1.04 0.91	 51 51 52 53 51 53 50 55 54 46 53 	68.7 73.6 67.7 72.3 70.3 72.0 69.0 71.9 68.2 69.3 70.3	8.6 9.0 9.8 9.6 9.8 9.4 10.0 9.8 10.0 9.3	12.1 13.1 12.9 13.6 12.2 12.1 12.6 14.2 14.0 9.7
Lockett 77 Tamcot 788 GSA 71 Coker 5110 Paymaster 303 Tamcot Sp 21S Paymaster 785 Western 44 Paymaster 266 Stripper 31A Dunn 119 Stoneville 213	1.03 1.07 1.02 1.13 1.02 1.04 0.96 1.05 1.04 0.91 1.05 1.09	.51 .51 .52 .53 .51 .53 .50 .55 .54 .46	68.7 73.6 67.7 72.3 70.3 72.0 69.0 71.9 68.2 69.3 70.3 71.1	8.6 9.0 9.8 9.6 9.8 9.4 10.0 9.8 10.0 9.3 9.2 9.7	12.1 13.1 12.9 13.6 12.2 12.1 12.6 14.2 14.0 9.7 14.3
Cokett 77 Flamcot 788 GSA 71 Coker 5110 Paymaster 303 Paymaster 785 Paymaster 785 Western 44 Paymaster 266 Stripper 31A Dunn 119 Stoneville 213 Lankart LX 571	1.03 1.07 1.02 1.13 1.02 1.04 0.96 1.05 1.04 0.91 1.05 1.09	.51 .51 .52 .53 .51 .53 .50 .55 .54 .46 .53 .53	68.7 73.6 67.7 72.3 70.3 72.0 69.0 71.9 68.2 69.3 70.3 71.1 69.1	8.6 9.0 9.8 9.6 9.8 9.4 10.0 9.8 10.0 9.3 9.2 9.7 9.5	12.1 13.1 12.9 13.6 12.2 12.1 12.6 14.2 14.0 9.7 14.3 13.5 11.9
Lockett 77 Tamcot 788 GSA 71 Coker 5110 Paymaster 303 Tamcot Sp 21S Paymaster 785 Western 44 Paymaster 266 Stripper 31A Dunn 119 Stoneville 213 Lankart LX 571 Coker 310	1.03 1.07 1.02 1.13 1.02 1.04 0.96 1.05 1.04 0.91 1.05 1.09 1.03	.51 .51 .52 .53 .51 .53 .50 .55 .54 .46 .53 .53 .53	68.7 73.6 67.7 72.3 70.3 72.0 69.0 71.9 68.2 69.3 70.3 71.1 69.1 70.2	8.6 9.0 9.8 9.6 9.8 9.4 10.0 9.8 10.0 9.3 9.2 9.7 9.5 9.5	12.1 13.1 12.9 13.6 12.2 12.1 12.6 14.2 14.0 9.7 14.3 13.5 11.9
Deltapine SR2 Lockett 77 Tamcot 788 GSA 71 Coker 5110 Paymaster 303 Tamcot Sp 21S Paymaster 785 Western 44 Paymaster 266 Stripper 31A Dunn 119 Stoneville 213 Lankart LX 571 Coker 310 Acala SJ-5 Pioneer PR68	1.03 1.07 1.02 1.13 1.02 1.04 0.96 1.05 1.04 0.91 1.05 1.09	.51 .51 .52 .53 .51 .53 .50 .55 .54 .46 .53 .53	68.7 73.6 67.7 72.3 70.3 72.0 69.0 71.9 68.2 69.3 70.3 71.1 69.1	8.6 9.0 9.8 9.6 9.8 9.4 10.0 9.8 10.0 9.3 9.2 9.7 9.5	12.1 13.1 12.9 13.6 12.2 12.1 12.6 14.2 14.0 9.7 14.3 13.5 11.9

Table 72.--Plains test: Seed data for Chickasha, Okla. (dryland)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Westburn M	17.5	4.10	0.85	8.6	6.0
Deltapine SR2	17.5	4.00	• 74	6.6	6.0
Lockett 77	17.2	3.70	•74	11.8	4.0
Tamcot 788	17.5	4.03	•75	10.8	7.5
GSA 71	16.9	4.02	•82	7.9	6.0
Coker 5110	16.2	3.92	•87	12.6	3.5
Paymaster 303	17.2	3.78	•78	10.6	4.0
Tamcot Sp 21S	17.0	3.94	• 75	7.4	7.5
Paymaster 785	15.7	3.83	•67	11.7	4.5
Western 44	16.8	3.98	• 70	8.5	6.0
Paymaster 266	16.6	3.68	•74	12.5	4.0
Stripper 31A	17.8	3.91	• 93	9.3	6.0
Dunn 119	16.4	3.78	•75	10.3	3.0
Stoneville 213	15.6	3.72	• 92	13.8	2.5
Lankart LX 571	17.9	3.97	• 70	9.1	6.0
Coker 310	16.2	3.93	•77	12.8	3.0
Acala SJ-5	18.7	3.91	•62	9.0	3.0
Pioneer PR68	16.6	4.00	• 74	8.9	6.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Westburn M	92.1	107.0	1.043	7.3	9.6
Deltapine SR2	99.2	112.5	1.009	8.5	10.0
Lockett 77 ·····	92.9	107.6	1.017	8.8	9.4
Tamcot 788	86.1	102.4	1.038	10.0	8.9
GSA 71	101.9	114.5	•999	7.3	10.2
Coker 5110	89.2	104.8	1.039	6.5	9.3
Paymaster 303	94.1	108.6	1.006	5.5	9.5
Tamcot Sp 21S	97.3	111.0	1.012	12.5	9.8
Paymaster 785	85.6	101.9	•978	22.0	8.4
Western 44	99.1	112.4	1.012	7.3	10.0
Paymaster 266	95.2	109.4	1.000	10.0	9.5
Stripper 31A	91.1	106.2	1.024	6.0	9.3
Dunn 119	118.3	126.5	• 975	4.8	11.5
Stoneville 213	91.7	106.8	1.005	12.0	9.2
	116.1	124.9	•996	5.8	11.6
Lankart LX 571					
	90.4	105.7	1.032	4.3	9.3
Lankart LX 571 Coker 310 Acala SJ-5		105.7 119.4	1.032 1.000	4.3 8.3	9.3 10.8

WESTERN REGIONAL COTTON VARIETY TEST

Table 73.--Western test: Yield, boll, and spinning data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
McNair 220	801 a	5.21 cd	39.1 a	10.2 e	4.33 b
Acala 1517-77	768 a	5.56 bc	35.2 d	12.1 ab	4.28 b
Acala SJ-5	7 61 a	6.03 a	38.7 a	11.5 bc	4.40 ab
Paymaster 303	753 a	6.03 a	37.3 b	11.4 c	4.43 ab
Stoneville 213	7 50 a	4.91 d	35.9 cd	10.6 de	4.58 a
Acala 1517-75	732 a	5.46 bc	37.3 ъ	12.4 a	4.00 c
Deltapine 61	710 a	5.07 d	36.7 bc	10.1 e	4.43 ab
Coker 310	658 a	5.45 bc	37.2 b	10.7 de	4.35 ab
Tamcot Sp 21	619 a	5.76 ab	39.1 a	11.0 cd	4.05 c
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
McNair 220	1.09 d	0.52 de	74.6 d	8.6 cd	12.6 b
Acala 1517-77	1.21 a	•58 a	75.6 bcd	9.1 abc	15.1 a
Acala SJ-5	1.17 b	•57 ab	76.2 bc	8.8 cd	14.7 a
Paymaster 303	1.09 d	•50 e	76.0 bc	9.5 a	11.6 e
Stoneville 213	1.13 c	•52 de	75.7 bcd	9.4 ab	11.8 de
Acala 1517-75	1.21 a	•59 a	75.7 bcd	8.4 d	14.9 a
	1.17 b	•55 bc	76.6 Ъ	9.4 ab	12.1 cd
pertablie of					
Deltapine 61 Coker 310	1.18 b	•54 cd	75.4 cd	9.1 abc	12.6 b

Table 74.--Western test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
McNair 220	19.7 b 20.5 a 20.8 a 20.4 a 18.0 b 20.7 a 18.5 c 19.2 c 20.5 a	3.40 abc 3.26 c 3.57 a 3.30 bc 3.28 bc 3.50 a 3.25 c 3.46 ab 3.46 ab	0.79 ef .84 de .71 f .92 bcd 1.02 a .86 de .87 cde .95 abc .97 ab	11.8 bc 13.3 b 10.2 cd 13.2 b 16.0 a 10.5 cd 13.7 b 13.4 b 8.8 d	5.0 b 3.8 c 3.6 c 3.8 c 3.8 c 4.2 c 4.2 c 3.8 c 5.6 a
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
McNair 220	96.3 ab 107.6 a 108.0 a 106.7 a 93.9 b 107.2 a 94.3 b 97.0 ab 107.1 a	110.3 ab 117.6 a 118.9 a 118.0 a 108.4 b 116.8 ab 108.6 b 110.8 ab 118.1 a	1.013 ab 1.024 a 1.032 a 1.014 ab 1.014 ab 1.017 ab 1.001 b 1.025 a 1.014 ab	2.5 a 2.1 a 0.9 a 1.7 a 1.6 a 2.6 a 2.5 a 2.1 a 1.6 a	9.8 c 11.0 a 11.2 a 10.8 ab 9.5 c 10.9 ab 9.4 c 10.0 bc 10.9 ab

Table 75.--Western test: Yield, boll, and spinning data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
El Paso, Tex	1103 a	6.00 a	38.6 a	12.2 a	4.49 a
Las Cruces, N. Mex.	854 Ъ	5.81 a	38.7 a	NA	NA
Artesia, N. Mex	228 c	4.98 Ъ	33.9 ь	10.6 Ъ	NA
Pecos, Tex	NA	5.21 Ъ	38.3 a	10.5 ъ	4.13 a
	Span length (inches)	Colorimeter		Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
El Paso, Tex	1.19 a	0.57 a	75.0 ь	8.5 b	13.3 a
Las Cruces, N. Mex.	1.13 b	•53 b	77.4 a	9.2 a	13.2 a
Artesia, N. Mex	NA	NA	NA	NA	NA
Pecos, Tex	1.14 b	•53 b	75.5 Ъ	9.3 a	12.8 ь

Table 76.--Western test: Seed data by test location

Location	0i1 (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
El Paso, Tex Las Cruces, N. Mex. Pecos, Tex	20.5 a	3.43 a	0.96 a	11.7 a	4.6 a
	19.1 b	3.47 a	.72 c	11.9 a	4.0 a
	19.4 b	3.30 a	.89 b	13.2 a	3.9 a
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
El Paso, Tex Las Cruces, N. Mex. Pecos, Tex	108.8 a	119.2 a	1.031 a	2.1 a	11.2 a
	103.6 a	115.7 a	1.008 a	3.0 a	10.4 a
	94.9 a	108.8 a	1.008 a	1.3 a	9.6 a

Table 77.--Western test: Yield, boll, and spinning data for El Paso, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 213	1403 a	5.71	37.8	12.3	4.95
McNair 220	1220 ab	5.51	40.9	10.6	4.50
Acala 1517-77	1185 ab	6.07	37.0	12.9	4.35
Acala 1517-75	1141 abc	5.80	38.7	13.5	4.10
Deltapine 61	1131 abc	5.49	37.8	11.7	4.70
Paymaster 303	1125 abc	6.27	38.8	12.3	4.40
Acala SJ-5	1033 abc	6.95	39.3	13.3	4.50
Coker 310	932 bc	6.25	38.2	12.0	4.75
Tamcot Sp 21	758 c	6.00	39.6	11.7	4.20
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 213	1.16	0.54	74.2	8.7	11.8
McNair 220	1.14	•55	73.9	8.3	12.9
Acala 1517-77	1.22	•60	74.5	8.3	15.5
Acala 1517-75	1.27	•63	75.4	8.0	14.9
Deltapine 61	1.21	• 59	75.9	8.9	12.2
Paymaster 303	1.13	•53	74.9	9.2	12.2
Acala SJ-5	1.22	•62	74.9	8.4	14.9
Coker 310	1.23	•59	74.1	8.6	12.9
Tamcot Sp 21	1.13	• 54	77.2	8.6	12.6

Table 78.--Western test: Seed data for El Paso, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 213	19.2	3.32	1.12	14.8	4.0
McNair 220	20.5	3.51	•88	10.3	6.0
Acala 1517-77	21.3	3.29	•97	14.3	4.0
Acala 1517-75	21.3	3.62	•95	8.6	5.0
Deltapine 61	19.4	3.21	• 97	13.4	4.0
Paymaster 303	20.7	3.45	•90	11.9	4.0
Acala SJ-5	21.1	3.59	•78	9.6	4.0
Coker 310	19.6	3.44	1.02	13.0	4.0
Tamcot Sp 21	21.6	3.48	1.04	7.9	6.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Stoneville 213	102.4	114.9	1.038	1.3	10.6
Mc Nair 220	95.5	109.6	1.031	2.8	9.8
Acala 1517-77	110.0	120.4	1.043	3.8	11.5
Acala 1517-75	133.4	132.0	1.018	2.9	13.6
Deltapine 61	104.9	116.7	1.006	2.8	10.5
Paymaster 303	107.6	118.7	1.033	1.6	11.1
Acala SJ-5	116.8	125.4	1.050	0.8	12.3
Coker 310	104.6	116.5	1.032	1.9	10.8
Tamcot Sp 21	116.9	125.2	1.022	2.0	11.9

Table 79.--Western test: Yield, boll, and spinning data for Las Cruces, N. Mex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Acala SJ-5	1056 a	6.36	40.9	NA	NA
McNair 220	918 Ъ	5.44	39.8	NA	NA
Acala 1517-75	888 ъ	5.50	38.9	NA	NA
Acala 1517-77	886 Ъ	5.84	35.6	NA	NA
Deltapine 61	853 Ъ	5.72	38.3	NA	NA
Coker 310	839 Ъс	5.68	39.1	NA	NA
Paymaster 303	810 bc	6.22	37.5	NA	NA
Tamcot Sp 21	741 cd	6.37	40.0	NA	NA
Stoneville 213	697 d	5.21	38.0	NA	NA
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Acala SJ-5	1.12	0.53	78.1	9.0	14.9
Mc Nair 220	1.05	•48	76.9	8.9	12.6
Acala 1517-75	1.19	• 58	75.8	8.4	15.0
Acala 1517-77	1.22	•58	78.0	9.5	15.1
Deltapine 61	1.16	• 53	77.7	9.4	12.3
Coker 310	1.16	•53	76.6	9.3	12.9
Paymaster 303	1.06	• 48	77.2	9.7	11.4
Tamcot Sp 21	1.08	•51	78.4	8.9	12.7
Stoneville 213	1.11	•51	77.9	9.5	12.0

Table 80.--Western test: Seed data for Las Cruces, N. Mex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-5	20.7	3.71	0.56	9.4	4.0
McNair 220	19.2	3.38	•63	NA	4.0
Acala 1517-75	20.4	3.65	• 7.2	10.4	4.0
Acala 1517-77	20.1	3.29	•63	11.5	4.0
Deltapine 61	17.7	3.37	• 74	12.5	4.0
Coker 310	19.2	3.62	.87	12.1	4.0
Paymaster 303	19.5	3.35	•69	13.7	4.0
Tamcot Sp 21	18.6	3.51	. 84	10.0	4.0
Stoneville 213	16.7	3.36	•82	16.0	4.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Acala SJ-5	99.8 NA 107.0 107.4 93.3 98.4 115.9 113.9	112.7 NA 118.3 118.6 108.0 111.9 124.7 123.3	1.030 NA 1.018 1.020 .987 1.032 .992 1.003	2.5 NA 4.0 2.0 4.0 2.5 3.5	10.3 NA 10.9 11.0 9.2 10.2 11.5 11.4
Stoneville 213	93.0	107.7	•979	4.5	9.1

Table 81.--Western test: Yield, boll, and spinning data for Artesia, N. Mex.

	(g/boll)	percent	index	reading
360 a	5.53	36.0	11.3	NA
326 a	6.03	35.3	10.9	NA
265 Ъ	5.14	35.1	10.9	NA
236 bc	4.94	31.7	11.7	NA
205 cd	4.74	33.8	10.2	NA
195 cde	4.84	35.9	10.0	NA
167 def	5.27	33.5	12.4	NA
152 ef	3.97	31.2	9.7	NA
146 f	4.37	32.9	9.0	NA
	326 a 265 b 236 bc 205 cd 195 cde 167 def 152 ef	326 a 6.03 265 b 5.14 236 bc 4.94 205 cd 4.74 195 cde 4.84 167 def 5.27 152 ef 3.97	326 a 6.03 35.3 265 b 5.14 35.1 236 bc 4.94 31.7 205 cd 4.74 33.8 195 cde 4.84 35.9 167 def 5.27 33.5 152 ef 3.97 31.2	326 a 6.03 35.3 10.9 265 b 5.14 35.1 10.9 236 bc 4.94 31.7 11.7 205 cd 4.74 33.8 10.2 195 cde 4.84 35.9 10.0 167 def 5.27 33.5 12.4 152 ef 3.97 31.2 9.7

Table 82.--Western test: Yield, boll, and spinning data for Pecos, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Acala 1517-77	NA	5•41	36.6	11.7	4.20
Acala 1517-75	NA	5.27	38.0	11.5	3.90
Acala SJ-5	NA	6.12	38.9	11.4	4.30
Paymaster 303	NA	5.61	37.5	11.2	4.45
Stoneville 213	NA	4.76	36.8	10.0	4.20
Coker 310	NA	5.14	37.8	9.9	3.95
Tamcot Sp 21	NA	5.17	41.0	9.9	3.90
Deltapine 61	NA	4.71	38.0	9.8	4.15
McNair 220	NA	4.76	40.7	9.2	4.15
	Span length (inches)	Colorimeter		Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
Acala 1517-77	1.19	0.56	74.3	9.4	14.7
Acala 1517-75	1.19	•58	75.9	8.8	14.9
Acala SJ-5	1.17	•57	75.7	9.0	14.5
Paymaster 303	1.10	•51	75.8	9.6	11.3
Stoneville 213	1.12	•51	74.9	10.0	11.7
Coker 310	1.15	•51	75.4	9.4	12.1
Tamcot Sp 21	1.09	• 52	77.9	9.2	11.6
Deltapine 61	1.16	• 54	76.2	10.0	11.8
McNair 220	1.09	• 54	73.1	8.8	12.4

Table 83.--Western test: Seed data for Pecos, Tex.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala 1517-77 Acala 1517-75 Acala SJ-5 Paymaster 303 Stoneville 213 Coker 310 Tamcot Sp 21 Deltapine 61 McNair 220	20.0 20.3 20.6 20.6 17.4 18.7 20.4 17.9	3.23 3.32 3.47 3.14 3.21 3.41 3.42 3.24 3.30	0.83 .83 .73 1.06 1.03 .91 .97 .83	13.3 11.5 11.2 14.2 17.3 14.4 9.2 14.7 13.3	3.5 3.5 3.0 3.5 3.5 3.5 6.0 4.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Acala 1517-77 Acala 1517-75 Acala SJ-5 Paymaster 303 Stoneville 213 Coker 310 Tamcot Sp 21 Deltapine 61 McNair 220	105.4 94.3 103.5 101.3 85.9 88.8 93.9 84.2 97.2	114.4 108.5 115.7 114.0 102.2 104.5 108.4 100.8 110.9	1.007 1.017 1.016 1.006 1.008 1.016 1.013 1.003 .995	0.6 1.8 0.3 1.0 0.5 2.3 1.5 1.5	10.6 9.6 10.5 10.2 8.7 9.0 9.5 8.4 9.7

SAN JOAQUIN VALLEY CONTINUOUS COTTON VARIETY TEST

Table 84.--San Joaquin test: Yield, boll, and spinning data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Acala SJ-2	1362 a 1352 a	7.39 a 7.15 a	37.2 ab 38.6 a	13.9 a 12.2 b	4.60 a 4.47 ab
Coker 310	1235 b	5.66 b	38.4 a	10.3 d	4.25 c
Stoneville 213 Paymaster 303	1217 b 1111 с	5.40 c 6.39 c	36.3 b 38.6 a	10.9 cd 11.3 c	4.42 b 4.48 ab
	Span length (Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Acala SJ-2	1.16 a	0.54 a	74.4 ab	8.7 bc	13.4 b
Acala SJ-5	1.17 a	•55 a	75.1 a	8.6 c	14.6 a
Coker 310	1.15 ab	•51 b	74.3 ab	8.6 bc	12.2 c
Stoneville 213 Paymaster 303	1.13 b 1.07 c	•50 c •48 c	73.6 b 73.8 b	8.8 ab 9.0 a	11.3 d 11.1 d

Table 85.—San Joaquin test: Seed data by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-2	21.8 d 24.3 a 22.8 bc 22.0 cd 23.1 b	3.27 d 3.50 a 3.44 ab 3.34 cd 3.41 bc	0.92 b .73 c 1.05 a 1.13 a .86 b	14.9 a 11.5 c 13.2 b 15.1 a 13.2 b	4.2 a 3.5 a 4.0 a 3.8 a 4.3 a
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Acala SJ-2	111.2 a 106.0 b 93.3 c 93.7 c 102.9 b	121.4 a 117.5 ab 107.9 c 110.0 c 115.1 b	1.042 b 1.068 a 1.031 bc 1.016 cd 1.007 d	2.8 b 1.3 b 7.4 a 7.8 a 5.9 a	11.6 a 11.2 a 9.6 c 9.5 c 10.4 b

Table 86.--San Joaquin test: Yield, boll, and spinning data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Maricopa, Calif West Side Field	1608 a	6.94 a	37.7 ab	11.9 a	4.84 a
Station, Calif	1485 Ъ	6.37 Ъ	38.7 a	11.5 a	4.64 b
Madera, Calif	675 c	5.88 c	37.2 ъ	11.9 a	3.85 c
	Span length (:	inches)	Color	Yarn	
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Maricopa, Calif West Side Field	1.13 ab	0.51 a	76.5 a	9.1 b	12.2 b
Station, Calif	1.13 Ъ	•52 b	75.5 Ъ	9.7 a	12.6 ab
•	1.15 a	•51 b	70.8 c	7.4 c	12.8 a

Table 87.--San Joaquin test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Maricopa, Calif West Side Field	21.4 a	3.15 b	1.05 a	14.0 a	3.5 a
Station, Calif	19.8 a	3.50 a	•89 a	13.6 ab	4.0 a
Madera, Calif	27.1 a	3.53 a	.87 a	13.1 b	4.4 a
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Maricopa, Calif West Side Field	100.0 a	114.0 a	1.060 a	1.8 b	10.6 a
Station, Calif	102.1 a	114.6 a	1.038 ab	2.8 Ъ	10.6 a
Madera, Calif	102.1 a	114.5 a	1.001 b	10.6 a	10.2 a

Table 88.--San Joaquin test: Yield, boll, and spinning data for Maricopa, Calif.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Acala SJ-2 Stoneville 213 Coker 310 Acala SJ-5 Paymaster 303	1850 a	8.03	37.2	13.7	4.95
	1695 b	5.65	37.1	10.6	4.85
	1607 b	6.75	39.1	10.9	4.95
	1596 b	7.68	38.4	12.3	4.60
	1294 c	6.58	36.7	12.0	4.85
	Span length (i 2.5%	nches) 50%	extstyle e	imeter Hunter's b value	Yarn tenacity (cN/tex)
Acala SJ-2 Stoneville 213 Coker 310 Acala SJ-5 Paymaster 303	1.18	0.55	76.7	9.2	13.2
	1.14	.50	75.3	8.9	11.1
	1.14	.50	77.0	9.2	11.8
	1.17	.54	77.3	9.0	14.6
	1.05	.48	76.1	9.5	10.5

Table 89.--San Joaquin test: Seed data for Maricopa, Calif.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-2 Stoneville 213 Coker 310 Acala SJ-5 Paymaster 303	20.3 21.0 22.4 22.1 21.4	3.05 3.12 3.19 3.18 3.21	1.07 1.27 1.26 .75	15.7 15.0 13.2 12.7 13.5	3.5 3.5 4.0 2.5 4.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Acala SJ-2 Stoneville 213 Coker 310 Acala SJ-5 Paymaster 303	110.1 92.2 90.7 103.1 104.1	120.6 112.1 105.9 115.4 116.1	1.052 1.050 1.088 1.079 1.029	0.8 3.8 0.3 1.0 3.3	11.6 9.7 9.9 11.1 10.8

Table 90.--San Joaquin test: Yield, boll, and spinning data for West Side Field Station, Calif.

Variety	Lint yield	Boll size	Lint	Seed	Micronaire
	(1b/acre)	(g/boll)	percent	index	reading
Acala SJ-5 Acala SJ-2 Paymaster 303 Coker 310 Stoneville 213	1550 a	7.13	39.8	12.1	4.60
	1524 a	7.21	38.6	13.5	4.85
	1496 a	6.29	39.6	10.6	4.80
	1478 a	5.64	39.2	10.1	4.30
	1378 b	5.58	36.2	11.0	4.65
	Span length (: 2.5%	inches) 50%	$\frac{Color}{R_d}$	imeter Hunter's b value	Yarn tenacity (cN/tex)
Acala SJ-5	1.16	0.55	76.5	9.3	14.4
	1.15	.55	75.3	9.6	13.6
	1.08	.50	75.1	9.9	11.1
	1.15	.52	75.5	9.7	12.4
	1.11	.50	74.9	10.0	11.4

Table 91.--San Joaquin test: Seed data for West Side Field Station, Calif.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-5 Acala SJ-2 Paymaster 303 Coker 310 Stoneville 213	21.2	3.60	0.71	11.3	4.0
	18.6	3.39	.90	14.4	4.0
	21.0	3.52	.81	13.6	4.0
	19.5	3.58	.96	12.8	4.0
	19.0	3.42	1.09	15.9	4.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Acala SJ-5 Acala SJ-2 Paymaster 303 Coker 310 Stoneville 213	105.9	117.5	1.066	0.5	11.3
	113.6	123.1	1.045	0.5	11.9
	97.0	110.7	1.030	2.8	10.0
	100.1	113.1	1.021	5.3	10.2
	94.1	108.6	1.029	5.0	9.7

Table 92.--San Joaquin test: Yield, boll, and spinning data for Madera, Calif.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Acala SJ-5	912 a	6.65	37.8	12.3	4.20
	715 b	6.92	36.0	14.6	4.00
	620 b	4.58	37.1	10.0	3.50
	581 b	4.98	35.6	11.1	3.75
	544 b	6.29	39.5	11.4	3.80
	Span length (inches) 50%	$\frac{Color}{R_d}$	Hunter's b value	Yarn tenacity (cN/tex)
Acala SJ-5	1.20	0.56	71.5	7.5	14.9
	1.17	.52	71.3	7.4	13.4
	1.17	.51	70.3	7.1	12.7
	1.13	.49	70.7	7.5	11.5
	1.09	.48	70.3	7.7	11.6

Table 93.--San Joaquin test: Seed data for Madera, Calif.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Acala SJ-5	29.6	3.73	0.75	10.5	4.0
Acala SJ-2	26.6	3.38	.80	14.6	5.0
Coker 310	26.5	3.55	•92	13.6	4.0
Stoneville 213	25.9	3.48	1.02	14.3	4.0
Paymaster 303	27.0	3.50	• 86	12.4	5.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Acala SJ-5	108.9	119.7	1.058	2.5	11.3
Acala SJ-2	109.9	120.4	1.029	7.0	11.4
Coker 310	89.3	104.8	•984	16.8	8.8
Stoneville 213	95.0	109.3	•971	14.8	9.2
Paymaster 303	107.6	118.6	.962	11.8	10.4

HIGH-QUALITY REGIONAL COTTON VARIETY TEST

Table 94.--High-quality test: Yield, boll, and spinning data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 1181	939 a	5.30 h	36.4 ef	11.5 cde	5.12 ab
Coker 600-B	914 ab	5.61 g	39.1 abc	11.3 e	4.80 cd
Mo. 63-277-1B	906 ab	6.05 c	37.9 cde	11.3 de	4.68 d
Mo. 74-944	869 abc	6.19 bc	37.2 de	11.9 b	4.63 d
Stoneville 1395	868 abc	5.60 g	39.6 ab	11.9 b	5.29 a
McNair 3151	866 abc	6.32 ab	36.4 ef	11.9 b	5.02 bc
Ga T 72-56	866 abc	5.98 cde	38.5 abcd	11.6 bcd	5.01 bc
Stoneville 213	853 abc	5.77 efg	37.7 cde	11.4 de	5.11 ab
Coker 310	852 abc	6.03 cd	38.0 bcde	11.3 e	4.89 c
Ga T 73-347863	847 abc	5.81 defg	40.0 a	11.2 e	4.83 cd
Coker 801-N	833 abc	5.96 cdef	38.3 bcd	11.7 bc	4.91 bc
PD 4548	820 abc	5.63 g	40.0 a	11.5 cde	4.91 bc
Coker 6118	814 abc	5.62 g	37.9 cde	11.7 bc	5.24 a
Deltapine 7559-6139	782 bc	6.51 a	35.4 f	14.1 a	4.31 e
PD 4585	764 c	5.75 fg	38.8 abcd	11.7 bc	4.93 bc
Acala SJ-5	452 d	6.08 c	38.2 bcd	11.9 b	4.66 d
	Span length (inches)	Colori	meter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 1181	1.18 d	0.57 ab	73.4 bcd	8.4 f	12.7 ef
Coker 600-B	1.21 b	•57 a	74.1 abc	8.7 abcd	12.9 def
Mo. 63-277-1B	1.18 de	•57 ab	73.2 cd	8.7 abc	13.1 cde
Mo. 74-944	1.14 hi	•57 a	73.1 cd	8.9 ab	12.9 def
Stoneville 1395	1.17 ef	•57 a	72.7 d	8.6 bcde	13.1 cde
McNair 3151	1.16 f	•56 bc	73.1 cd	8.3 f	12.1 g
Ga T 72-56					
Ga 1 /2-30	1.14 ghi	•54 c	73.3 bcd	8.3 f	12.7 f
Stoneville 213	1.14 ghi 1.14 i	•54 c •55 c	73.3 bcd 74.3 ab	8.3 f 8.9 ab	
Stoneville 213					12.7 f 11.9 g 12.9 def
Stoneville 213 Coker 310	1.14 i	•55 c	74.3 ab	8.9 ab	11.9 g 12.9 def
Stoneville 213 Coker 310 Ga T 73-347863	1.14 i 1.19 cd	•55 c •56 ab	74.3 ab 73.4 bcd	8.9 ab 8.7 abc 8.7 abcd	11.9 g 12.9 def 13.1 cd
Stoneville 213 Coker 310 Ga T 73-347863 Coker 801-N	1.14 i 1.19 cd 1.20 bc	•55 c •56 ab •56 ab	74.3 ab 73.4 bcd 73.5 bcd	8.9 ab 8.7 abc 8.7 abcd	11.9 g 12.9 def 13.1 cd
	1.14 i 1.19 cd 1.20 bc 1.16 fg	•55 c •56 ab •56 ab •57 a	74.3 ab 73.4 bcd 73.5 bcd 73.3 bcd	8.9 ab 8.7 abc 8.7 abcd 8.5 cdef	11.9 g 12.9 def 13.1 cd 12.8 def
Stoneville 213 Coker 310 Ga T 73-347863 Coker 801-N PD 4548	1.14 i 1.19 cd 1.20 bc 1.16 fg 1.18 cd	•55 c•56 ab•57 a•57 ab	74.3 ab 73.4 bcd 73.5 bcd 73.3 bcd 73.4 bcd	8.9 ab 8.7 abc 8.7 abcd 8.5 cdef 8.7 abc	11.9 g 12.9 def 13.1 cd 12.8 def 13.7 b
Stoneville 213 Coker 310 Ga T 73-347863 Coker 801-N PD 4548 Coker 6118	1.14 i 1.19 cd 1.20 bc 1.16 fg 1.18 cd 1.16 f	.55 c .56 ab .56 ab .57 a .57 ab	74.3 ab 73.4 bcd 73.5 bcd 73.3 bcd 73.4 bcd 71.8 e	8.9 ab 8.7 abc 8.7 abcd 8.5 cdef 8.7 abc 8.9 a 8.4 def	11.9 g 12.9 def 13.1 cd 12.8 def 13.7 b 12.1 g

Table 95.--High-quality test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 1181 Coker 600-B Mo. 63-277-1B Mo. 74-944 Stoneville 1395 McNair 3151 Ga T 72-56 Stoneville 213 Coker 310 Coker 310 Coker 801-N PD 4548 Coker 6118 Deltapine 7559-6139 PD 4585 Acala SJ-5	21.8 cd 22.5 b 22.2 bc 22.1 bc 23.6 a 20.1 g 20.3 g 20.7 fg 21.2 ef 21.0 ef 21.4 de 22.5 b 21.3 de 20.3 g 22.2 bc 22.2 bc	2.97 g 3.33 ab 3.40 a 3.32 ab 3.38 a 2.97 g 3.21 d 3.04 fg 3.14 de 3.23 bcd 3.14 de 3.31 abc 3.09 ef 3.19 d 3.22 cd 3.35 a	1.31 b 1.14 def 1.27 bc 1.22 bcd 1.42 a 1.04 gh .98 hi 1.20 cde 1.10 efg .98 hi 1.12 defg 1.08 fgh .49 k 1.19 cde .92 ij .87 j	12.5 cdef 15.6 a 12.9 bcdef 11.5 efg 13.3 bcde 14.7 ab 14.8 ab 15.0 ab 14.4 abc 13.4 bcde 11.8 defg 14.4 abc 13.6 abcd 11.0 fg 13.9 abc 10.1 g	4.0 ab 4.0 ab 4.0 ab 4.0 ab 3.8 ab 3.9 ab 3.9 ab 3.9 ab 3.6 b 4.4 a 3.8 ab 3.9 ab 4.1 ab 3.9 ab 4.1 ab
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Stoneville 213 Coker 310 Ga T 73-347863 Coker 801-N PD 4548 Coker 6118	104.8 bcde	112.3 efghi 124.0 b 120.9 bcd 111.4 fghi 116.7 cdef	.995 defg .998 cdef 1.036 b 1.011 bcde	4.5 ab 7.8 ab 2.3 b 3.5 ab 5.0 ab 5.8 ab	11.1 bc 10.1 efg 10.3 cdef 10.8 bcde 11.3 b 10.8 bcde 9.3 g 10.4 cdef 9.6 fg 10.9 bcde 11.0 bc 10.1 defg 10.6 bcde
Deltapine 7559-6139 PD 4585 Acala SJ-5	135.2 a 103.3 cdef 106.9 bcd		.953 i 1.016 bcd 1.026 b	9.0 a 5.0 ab 7.3 ab	12.9 a 10.5 bcde 11.0 bcd

Table 96.--High-quality test: Yield, boll, and spinning data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
St. Joseph, La College Station,	1210 a	5.74 cd	39.2 ab	11.9 с	4.84 c
Tex	1052 Ъ	5.24 e	35.8 cd	10.6 e	4.38 e
Portageville, Mo	913 c	6.85 a	38.4 Ъ	13.2 a	4.96 bc
Jackson, Tenn	863 d	5.88 c	35.4 d	11.9 c	4.36 e
Belle Mina, Ala	860 d	5.85 cd	39.7 ab	NA	5.08 Ъ
Florence, S. C	859 d	5.84 cd	39.7 a	11.4 d	5.49 a
Rohwer, Ark	856 d	NA	36.8 c	NA	4.57 d
Tifton, Ga	686 e	5.70 d	39.6 ab	11.8 c	4.65 d
Stoneville, Miss	607 f	6.13 b	38.4 ab	12.4 b	5.03 bc
Rocky Mount, N. C.	372 g	5.76 cd	39.1 ab	10.8 e	5.38 a
	Span length (in	nches)	Colorin	neter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
St. Joseph, La College Station,	1.20 a	0.58 a	74.7 Ъ	8.3 f	13.5 b
Tex	1.17 cd	•56 c	69.6 e	7.0 g	12.6 de
Portageville, Mo	1.20 a	•57 b	69.0 e	8.5 e	13.3 ь
Jackson, Tenn	1.18 b	•57 bc	73.4 d	9.3 a	12.5 ef
Belle Mina, Ala	1.16 d	•55 d	73.9 cd	8.9 bc	12.3 f
Florence, S. C	1.15 e	•55 d	75•5 a	9.0 b	12.9 c
Rohwer, Ark	1.17 bc	•56 bc	75.9 a	8.8 cd	12.7 cd
Tifton, Ga	1.17 bc	•57 bc	74.5 bc	9.2 a	12.9 c
•	1.21 a	•58 a	74.6 bc	8.7 d	14.0 a
Stoneville, Miss	1021 0	# J U U			

Table 97.--High-quality test: Seed data by test location

Location	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
St. Joseph, La Jackson, Tenn Belle Mina, Ala Florence, S. C	21.9 a	3.21 a	1.10 a	NA	4.3 a
	20.5 b	3.31 a	.97 a	13.3	3.7 a
	21.9 a	3.18 a	1.15 a	NA	3.7 a
	22.0 a	3.12 a	1.12 a	NA	4.1 a
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
St. Joseph, La Jackson, Tenn Belle Mina, Ala Florence, S. C	NA	NA	NA	NA	NA
	105•9	117.6	1.007	5.0	10.7
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA

NA, Data not available.

Table 98.--High-quality test: Combined yield, boll, and spinning data for St. Joseph, La.; College Station, Tex.; Portageville, Mo.; Jackson, Tenn.; Rohwer, Ark.; and Stoneville, Miss., by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Mo. 63-277-1B	1064 a	6.06	36.9	11.5	4.53
Stoneville 1181	1039 a	5.35	35.2	11.7	4.88
Coker 600-B	1015 ab	6.32	35.6	12.1	4.79
Mo . 74-944	982 abc	6.16	36.2	12.3	4.45
Stoneville 1395	969 abc	5.55	38.4	12.1	4.98
Stoneville 213	954 bc	5.88	36.8	11.7	4.83
McNair 3151	948 bc	6.63	34.8	14.2	4.14
Coker 310	944 bc	6.11	36.9	11.5	4.66
Ga T 73-347863	933 bcd	5.82	39.4	11.5	4.61
Ga T 72-56	932 bcd	5.98	37.7	11.7	4.86
Coker 801-N	912 bcd	5.75	38.5	11.5	4.59
Coker 6118	884 cde	5.68	39.0	11.7	4.78
PD 4548	880 cde	6.25	37.6	12.1	4.72
Deltapine 7559-6139	830 de	5.60	37.0	11.8	4.95
PD 4585	803 e	6.00	37.9	12.1	4.74
Acala SJ-5	580 f	6.34	38.1	12.3	4.47
Acara 51-7		0.54	70•T	12.5	4•47
	Span length (imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
		0.57		0 /	12 /
Mo. $63-277-1B$	1.19	U > 5 /	73.0	8.4	1 3 4
	1.19	0.57	73.0 72.7	8.4 8.1	13.4
Stoneville 1181	1.19	•57	72.7	8.1	12.9
Stoneville 1181 Coker 600-B	1.19 1.17	•57 •57	72.7 72.8	8.1 8.3	12.9 12.3
Stoneville 1181 Coker 600-B Mo. 74-944	1.19 1.17 1.15	•57 •57 •58	72.7 72.8 72.8	8.1 8.3 8.7	12.9 12.3 13.1
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395	1.19 1.17 1.15 1.17	•57 •57 •58 •57	72.7 72.8 72.8 71.7	8.1 8.3 8.7 8.3	12.9 12.3 13.1 13.0
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213	1.19 1.17 1.15 1.17 1.16	•57 •57 •58 •57 •55	72.7 72.8 72.8 71.7 73.8	8.1 8.3 8.7 8.3 8.6	12.9 12.3 13.1 13.0 12.2
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151	1.19 1.17 1.15 1.17 1.16 1.27	•57 •57 •58 •57 •55	72.7 72.8 72.8 71.7 73.8 73.9	8.1 8.3 8.7 8.3 8.6 8.1	12.9 12.3 13.1 13.0 12.2 13.0
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151 Coker 310	1.19 1.17 1.15 1.17 1.16 1.27 1.21	•57 •57 •58 •57 •55 •58	72.7 72.8 72.8 71.7 73.8 73.9 72.9	8.1 8.3 8.7 8.3 8.6 8.1	12.9 12.3 13.1 13.0 12.2 13.0
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151 Coker 310 Ga T 73-347863	1.19 1.17 1.15 1.17 1.16 1.27 1.21	•57 •57 •58 •57 •55 •58 •58	72.7 72.8 72.8 71.7 73.8 73.9 72.9 73.1	8.1 8.3 8.7 8.3 8.6 8.1 8.4	12.9 12.3 13.1 13.0 12.2 13.0 13.1
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151 Coker 310 Ga T 73-347863 Ga T 72-56	1.19 1.17 1.15 1.17 1.16 1.27 1.21 1.21	•57 •57 •58 •57 •55 •58 •58 •56	72.7 72.8 72.8 71.7 73.8 73.9 72.9 73.1 72.7	8.1 8.3 8.7 8.3 8.6 8.1 8.4 8.5	12.9 12.3 13.1 13.0 12.2 13.0 13.1 13.2 12.8
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151 Coker 310 Ga T 73-347863 Ga T 72-56 Coker 801-N	1.19 1.17 1.15 1.17 1.16 1.27 1.21 1.21 1.16 1.23	•57 •57 •58 •57 •55 •58 •58 •56 •56	72.7 72.8 72.8 71.7 73.8 73.9 72.9 73.1 72.7 73.6	8.1 8.3 8.7 8.3 8.6 8.1 8.4 8.5 8.2	12.9 12.3 13.1 13.0 12.2 13.0 13.1 13.2 12.8 13.1
Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151 Coker 310 Ga T 73-347863 Ga T 72-56 Coker 801-N Coker 6118	1.19 1.17 1.15 1.17 1.16 1.27 1.21 1.21 1.16 1.23 1.20	• 57 • 57 • 58 • 57 • 55 • 58 • 56 • 56 • 56 • 58 • 58	72.7 72.8 72.8 71.7 73.8 73.9 72.9 73.1 72.7 73.6 72.5	8.1 8.3 8.7 8.3 8.6 8.1 8.4 8.5 8.2 8.5	12.9 12.3 13.1 13.0 12.2 13.0 13.1 13.2 12.8 13.1
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151 Coker 310 Ga T 73-347863 Ga T 72-56 Coker 801-N Coker 6118 PD 4548	1.19 1.17 1.15 1.17 1.16 1.27 1.21 1.21 1.16 1.23 1.20 1.18	•57 •57 •58 •57 •55 •58 •58 •56 •56 •56 •58 •58	72.7 72.8 72.8 71.7 73.8 73.9 72.9 73.1 72.7 73.6 72.5 72.7	8.1 8.3 8.7 8.3 8.6 8.1 8.4 8.5 8.2 8.5 8.6 8.3	12.9 12.3 13.1 13.0 12.2 13.0 13.1 13.2 12.8 13.1 13.7
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151 Coker 310 Ga T 73-347863 Ga T 72-56 Coker 801-N Coker 6118 PD 4548 Deltapine 7559-6139	1.19 1.17 1.15 1.17 1.16 1.27 1.21 1.21 1.16 1.23 1.20 1.18	• 57 • 58 • 57 • 55 • 58 • 58 • 56 • 56 • 58 • 58 • 58 • 58 • 58	72.7 72.8 72.8 71.7 73.8 73.9 72.9 73.1 72.7 73.6 72.5 72.7 71.2	8.1 8.3 8.7 8.3 8.6 8.1 8.4 8.5 8.2 8.5 8.6 8.3	12.9 12.3 13.1 13.0 12.2 13.0 13.1 13.2 12.8 13.1 13.7 13.2 12.4
Stoneville 1181 Coker 600-B Mo. 74-944 Stoneville 1395 Stoneville 213 McNair 3151 Coker 310 Ga T 73-347863 Ga T 72-56 Coker 801-N Coker 6118 PD 4548	1.19 1.17 1.15 1.17 1.16 1.27 1.21 1.21 1.16 1.23 1.20 1.18	•57 •57 •58 •57 •55 •58 •58 •56 •56 •56 •58 •58	72.7 72.8 72.8 71.7 73.8 73.9 72.9 73.1 72.7 73.6 72.5 72.7	8.1 8.3 8.7 8.3 8.6 8.1 8.4 8.5 8.2 8.5 8.6 8.3	12.9 12.3 13.1 13.0 12.2 13.0 13.1 13.2 12.8 13.1 13.7

Table 99.--High-quality test: Combined yield, boll, and spinning data for Belle Mina, Ala.; Florence, S. C.; Tifton, Ga.; and Rocky Mount, N. C., by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 1181	789 a	5.24	38.4	11.2	5.48
Ga T 72-56	768 ab	5.98	39.9	11.4	5.23
Coker 600-B	762 ab	5.44	40.1	11.0	5.11
McNair 3151	741 abc	6.31	37.6	11.8	5.35
PD 4548	729 abc	5.57	41.6	11.2	5.10
Ga T 73-347863	718 abc	5.80	41.1	10.7	5.15
Stoneville 1395	715 abc	5.67	41.6	11.7	5.69
Coker 801-N	713 abc	5.58	39.6	11.1	5.20
Coker 310	713 abc	5.94	39.9	10.9	5.23
Coker 6118	708 abc	5.64	39.5	11.5	5.66
PD 4585	706 abc	5.43	40.4	11.2	5.20
Stoneville 213	700 abc	5.62	39.2	10.7	5.54
Mo. 74-944	699 abc	6.22	38.9	11.2	4.89
Mo. 63-277-1B	668 bc	6.03	39.6	11.0	4.89
Deltapine 7559-6139	634 c	6.36	36.5	13.9	4.55
Acala SJ-5	334 d	5.75	38.5	11.1	4.73
	Span length (inches)	Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 1181	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 1181 Ga T 72-56	1.17	50% 0.57	74.4	Hunter's b value	tenacity (cN/tex)
Ga T 72-56	1.17 1.11	50% 0•57 •53	74.4 74.3	Hunter's b value 8.8 8.5	tenacity (cN/tex) 12.5 12.5
Ga T 72-56 Coker 600-B	1.17 1.11 1.18	0.57 .53 .56	74.4 74.3 74.8	Hunter's b value 8.8 8.5 9.0	tenacity (cN/tex) 12.5 12.5 12.6
Ga T 72-56	1.17 1.11 1.18 1.14	50% 0.57 .53 .56 .54	74.4 74.3 74.8 73.4	Hunter's b value 8.8 8.5 9.0 8.4	tenacity (cN/tex) 12.5 12.5 12.6 11.8
Ga T 72-56 Coker 600-B McNair 3151 PD 4548	1.17 1.11 1.18 1.14 1.17	50% 0.57 .53 .56 .54 .56	74.4 74.3 74.8 73.4 74.7	Hunter's b value 8.8 8.5 9.0 8.4 8.8	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19	50% 0.57 .53 .56 .54 .56 .56	74.4 74.3 74.8 73.4 74.7 74.0	Hunter's b value 8.8 8.5 9.0 8.4 8.8 8.8	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16	50% 0.57 .53 .56 .54 .56 .56 .57	74.4 74.3 74.8 73.4 74.7 74.0 74.0	Hunter's b value 8.8 8.5 9.0 8.4 8.8 8.8 9.0	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16 1.13	50% 0.57 .53 .56 .54 .56 .56 .57 .56	74.4 74.3 74.8 73.4 74.7 74.0 74.0 74.4	Hunter's b value 8.8 8.5 9.0 8.4 8.8 8.8 9.0 8.9	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16 1.13 1.15	50% 0.57 .53 .56 .54 .56 .56 .56 .57 .56 .55	74.4 74.3 74.8 73.4 74.7 74.0 74.0 74.0	Hunter's b value 8.8 8.5 9.0 8.4 8.8 9.0 8.9 9.3	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2 12.3 12.7
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16 1.13 1.15	50% 0.57 .53 .56 .54 .56 .56 .56 .57 .56 .55	74.4 74.3 74.8 73.4 74.7 74.0 74.0 74.0 72.6	Hunter's b value 8.8 8.5 9.0 8.4 8.8 9.0 8.9 9.3 9.3	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2 12.3 12.7 11.5
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16 1.13 1.15 1.14	50% 0.57 .53 .56 .54 .56 .56 .57 .56 .55 .54 .55	74.4 74.3 74.8 73.4 74.7 74.0 74.0 74.4 74.0 72.6 74.6	Hunter's b value 8.8 8.5 9.0 8.4 8.8 9.0 8.9 9.3 9.3	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2 12.3 12.7 11.5 13.2
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16 1.13 1.15 1.14 1.16	50% 0.57 .53 .56 .54 .56 .56 .57 .56 .55 .54 .55	74.4 74.3 74.8 73.4 74.7 74.0 74.0 74.6 74.6 75.1	Hunter's b value 8.8 8.5 9.0 8.4 8.8 9.0 8.9 9.3 9.3 9.3	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2 12.3 12.7 11.5 13.2 11.3
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16 1.13 1.15 1.14 1.16 1.10	50% 0.57 .53 .56 .54 .56 .56 .57 .56 .55 .54 .55	74.4 74.3 74.8 73.4 74.0 74.0 74.0 74.6 75.1 73.7	Hunter's b value 8.8 8.5 9.0 8.4 8.8 9.0 8.9 9.3 9.3 9.1 9.3 9.1	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2 12.3 12.7 11.5 13.2 11.3 12.8
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16 1.13 1.15 1.14 1.16 1.10	50% 0.57 .53 .56 .54 .56 .57 .56 .55 .54 .55 .54 .55 .54 .56	74.4 74.3 74.8 73.4 74.7 74.0 74.0 74.0 74.6 74.6 75.1 73.7 73.3	Hunter's b value 8.8 8.5 9.0 8.4 8.8 9.0 8.9 9.3 9.3 9.1 9.3 9.2 9.2	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2 12.3 12.7 11.5 13.2 11.3 12.8 12.7
Ga T 72-56	1.17 1.11 1.18 1.14 1.17 1.19 1.16 1.13 1.15 1.14 1.16 1.10	50% 0.57 .53 .56 .54 .56 .56 .57 .56 .55 .54 .55	74.4 74.3 74.8 73.4 74.0 74.0 74.0 74.6 75.1 73.7	Hunter's b value 8.8 8.5 9.0 8.4 8.8 9.0 8.9 9.3 9.3 9.1 9.3 9.1	tenacity (cN/tex) 12.5 12.5 12.6 11.8 13.8 12.9 13.2 12.3 12.7 11.5 13.2 11.3

Table 100.--High-quality test: Yield, boll, and spinning data for St. Joseph, La.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 1181	1429 a	5.17	38.4	11.5	5.10
PD 4548	1316 ab	5.62	42.2	11.5	5.00
Coker 310	1310 ab	6.00	38.7	11.4	4.75
Coker 600-B	1298 abc	5.31	39.7	11.0	4.65
McNair 3151	1293 abc	6.10	37.9	11.8	5.00
Stoneville 213	1284 abc	5.78	39.1	11.6	5.10
Ga T 73-347863	1268 abc.	5.61	41.0	11.0	4.75
Stoneville 1395	1216 bc	5.03	42.1	11.4	5.35
Mo. 63-277-1B	1209 bc	5.60	38.9	11.7	4.70
Ga T 72-56	1207 bc	5.99	39.3	12.3	5.05
PD 4585	1204 bc	5.71	41.3	11.1	4.75
Coker 6118	1185 bc	5.61	38.6	12.2	5.00
Deltapine 7559-6139	1163 bc	6.41	35.5	14.9	4.20
Coker 801-N	1160 bc	5.82	39.2	12.3	4.85
Mo. 74-944	1114 c	5.97	37.5	12.2	4.50
Acala SJ-5	699 d	6.14	38.7	12.8	4.75
	Span length (inches)	Colorimeter		Yarn
		/			20211
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 1181	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
	1.20	50% 0.59	72.1	Hunter's b value	tenacity (cN/tex)
PD 4548	1.20 1.22	0.59 .61	72.1 75.5	Hunter's b value 7.2 8.3	tenacity (cN/tex)
PD 4548	1.20 1.22 1.25	0.59 .61 .59	72.1 75.5 73.5	Hunter's b value 7.2 8.3 8.0	tenacity (cN/tex) 13.1 14.4 13.6
PD 4548	1.20 1.22 1.25 1.28	0.59 .61 .59 .62	72.1 75.5 73.5 76.2	Hunter's b value 7.2 8.3 8.0 8.6	tenacity (cN/tex) 13.1 14.4 13.6 13.4
PD 4548	1.20 1.22 1.25 1.28 1.16	50% 0.59 .61 .59 .62 .54	72.1 75.5 73.5 76.2 74.2	Hunter's b value 7.2 8.3 8.0 8.6 7.9	13.1 14.4 13.6 13.4 12.6
PD 4548	1.20 1.22 1.25 1.28 1.16 1.16	50% 0.59 .61 .59 .62 .54 .56	72.1 75.5 73.5 76.2 74.2 75.6	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2
PD 4548	1.20 1.22 1.25 1.28 1.16 1.16	50% 0.59 .61 .59 .62 .54 .56 .57	72.1 75.5 73.5 76.2 74.2 75.6 74.4	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6 8.3	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2 13.4
PD 4548	1.20 1.22 1.25 1.28 1.16 1.16 1.18	50% 0.59 .61 .59 .62 .54 .56 .57 .60	72.1 75.5 73.5 76.2 74.2 75.6 74.4 75.1	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6 8.3 8.5	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2 13.4 14.0
PD 4548	1.20 1.22 1.25 1.28 1.16 1.16 1.11 1.18	50% 0.59 .61 .59 .62 .54 .56 .57 .60 .53	72.1 75.5 73.5 76.2 74.2 75.6 74.4 75.1	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6 8.3 8.5 8.3	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2 13.4 14.0 14.3
PD 4548	1.20 1.22 1.25 1.28 1.16 1.16 1.11 1.18 1.15	50% 0.59 .61 .59 .62 .54 .56 .57 .60 .53 .55	72.1 75.5 73.5 76.2 74.2 75.6 74.4 75.1 75.1	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6 8.3 8.5 8.3 8.5	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2 13.4 14.0 14.3 13.0
PD 4548	1.20 1.22 1.25 1.28 1.16 1.16 1.18 1.15 1.15	50% 0.59 .61 .59 .62 .54 .56 .57 .60 .53 .55	72.1 75.5 73.5 76.2 74.2 75.6 74.4 75.1 75.1 75.1 76.3	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6 8.3 8.5 8.3 8.5 8.3	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2 13.4 14.0 14.3 13.0 13.8
PD 4548	1.20 1.22 1.25 1.28 1.16 1.16 1.18 1.15 1.15 1.21 1.21	50% 0.59 .61 .59 .62 .54 .56 .57 .60 .53 .55 .60 .57	72.1 75.5 73.5 76.2 74.2 75.6 74.4 75.1 75.1 75.1 76.3 74.0	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6 8.3 8.5 8.3 8.9	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2 13.4 14.0 14.3 13.0 13.8 12.8
PD 4548	1.20 1.22 1.25 1.28 1.16 1.16 1.11 1.18 1.15 1.15 1.21 1.20 1.31	50% 0.59 .61 .59 .62 .54 .56 .57 .60 .53 .55 .60 .57 .62	72.1 75.5 73.5 76.2 74.2 75.6 74.4 75.1 75.1 75.1 73.7 76.3 74.0 75.7	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6 8.3 8.5 8.3 8.0 8.5 8.3	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2 13.4 14.0 14.3 13.0 13.8 12.8 13.5
Stoneville 1181 PD 4548 Coker 310 Coker 600-B McNair 3151 Stoneville 213 Ga T 73-347863 Stoneville 1395 Mo 63-277-1B Ga T 72-56 PD 4585 Coker 6118 Deltapine 7559-6139 Coker 801-N Mo 74-944	1.20 1.22 1.25 1.28 1.16 1.16 1.18 1.15 1.15 1.21 1.21	50% 0.59 .61 .59 .62 .54 .56 .57 .60 .53 .55 .60 .57	72.1 75.5 73.5 76.2 74.2 75.6 74.4 75.1 75.1 75.1 76.3 74.0	Hunter's b value 7.2 8.3 8.0 8.6 7.9 8.6 8.3 8.5 8.3 8.9	tenacity (cN/tex) 13.1 14.4 13.6 13.4 12.6 12.2 13.4 14.0 14.3 13.0 13.8 12.8

Table 101.--High-quality test: Seed data for St. Joseph, La.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 1181	21.7	2.95	1.17	NA	4.5
PD 4548	23.3	3.34	1.05	NA	4.0
Coker 310	21.8	3.08	1.16	NA	4.0
Coker 600-B	22.9	3.34	1.11	NA	4.5
McNair 3151	20.6	3.00	1.12	NA	4.0
Stoneville 213	20.8	3.07	1.29	NA	4.0
Ga T 73-347863	21.6	3.20	1.05	NA	4.0
Stoneville 1395	24.4	3.38	1.41	NA	4.0
Mo. 63-277-1B	21.9	3.58	1.28	NA	4.0
Ga T 72-56	20.6	3.15	1.03	NA	4.0
PD 4585	22.1	3.30	•88	NA	4.0
Coker 6118	21.5	3.01	• 54	NA	4.0
Deltapine 7559-6139	21.0	3.16	1.21	NA	5.0
Coker 801-N	21.7	3.15	1.16	NA	5.0
Mo. 74-944	23.1	3.38	1.18	NA	4.5
Acala SJ-5	22.6	3.33	1.03	NA	4.0

Table 102.--High-quality test: Yield, boll, and spinning data for College Station, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 1181	1266 a	4.74	35.5	10.0	4.70
PD 4548	1139 ab	5.08	38.3	9.7	4.25
Coker 801-N	1122 bc	5.44	37.0	10.6	4.55
Coker 600-B	1122 bc	5.05	35.0	10.2	4.25
Mo. 63-277-1B	1115 bc	5.54	37.2	10.7	4.45
Stoneville 213	1102 bc	5.01	35.9	9.9	4.50
D 4585	1069 bcd	5.36	36.8	10.6	4.15
6. 74-944	1067 bcd	5.56	35.5	11.6	4.50
CNair 3151	1063 bcd	5.26	34.2	10.7	4.35
oker 310	1044 bcd	5.21	35.5	10.2	4.25
toneville 1395	1035 bcd	4.66	38.4	11.0	4.80
a T 72-56	1031 bcd	5.24	34.9	10.8	4.55
а Т 73-347863	1015 bcd	4.92	37.0	10.1	4.30
Coker 6118	976 cd	4.88	33.8	10.1	4.20
Deltapine 7559-6139	940 d	6.01	32.6	12.9	4.05
Acala SJ-5	721 e	5.96	35.6	11.3	4.25
	Span length (inches)		Colorimeter		V
		inches)	COTOL	imeter	Yarn
	2.5%	50%	$\frac{Color}{R_d}$	Hunter's b value	tenacity (cN/tex)
Stoneville 1181	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
	1.17	50% 0.56	70.0	Hunter's b value	tenacity (cN/tex)
D 4548	1.17 1.16	50% 0.56 .54	70.0 69.9	Hunter's b value 7.0 6.8	tenacity (cN/tex)
0 4548 oker 801-N	1.17 1.16 1.15	50% 0.56 .54 .59	70.0 69.9 68.6	Hunter's b value 7.0 6.8 6.9	tenacity (cN/tex) 12.0 13.8 12.7
0 4548	1.17 1.16 1.15 1.17	50% 0.56 .54 .59 .54	70.0 69.9 68.6 70.5	Hunter's b value 7.0 6.8 6.9 7.0	tenacity (cN/tex) 12.0 13.8 12.7 12.7
oker 801-N oker 600-B o. 63-277-1B	1.17 1.16 1.15 1.17 1.18	50% 0.56 .54 .59 .54 .57	70.0 69.9 68.6 70.5 68.6	Hunter's b value 7.0 6.8 6.9 7.0 7.3	12.0 13.8 12.7 12.7 12.7
0 4548	1.17 1.16 1.15 1.17 1.18 1.15	50% 0.56 .54 .59 .54 .57 .54	70.0 69.9 68.6 70.5 68.6 70.4	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9
D 4548	1.17 1.16 1.15 1.17 1.18 1.15 1.19	50% 0.56 .54 .59 .54 .57 .54	70.0 69.9 68.6 70.5 68.6 70.4 70.0	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0
Coker 801-N	1.17 1.16 1.15 1.17 1.18 1.15 1.19	50% 0.56 .54 .59 .54 .57 .54 .57	70.0 69.9 68.6 70.5 68.6 70.4 70.0 69.4	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2 7.6	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0 12.8
Coker 801-N	1.17 1.16 1.15 1.17 1.18 1.15 1.19 1.14 1.18	50% 0.56 .54 .59 .54 .57 .54 .57 .58 .57	70.0 69.9 68.6 70.5 68.6 70.4 70.0 69.4 69.5	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2 7.6 6.9	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0 12.8 11.8
Coker 801-N	1.17 1.16 1.15 1.17 1.18 1.15 1.19 1.14 1.18	50% 0.56 .54 .59 .54 .57 .54 .57 .58 .57 .55	70.0 69.9 68.6 70.5 68.6 70.4 70.0 69.4 69.5	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2 7.6 6.9 7.0	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0 12.8 11.8 12.4
Coker 801-N	1.17 1.16 1.15 1.17 1.18 1.15 1.19 1.14 1.18 1.18	50% 0.56 .54 .59 .54 .57 .54 .57 .58 .57 .55	70.0 69.9 68.6 70.5 68.6 70.4 70.0 69.4 69.5 69.5	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2 7.6 6.9 7.0 6.6	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0 12.8 11.8 12.4 13.1
Coker 801-N	1.17 1.16 1.15 1.17 1.18 1.15 1.19 1.14 1.18 1.18 1.17	50% 0.56 .54 .59 .54 .57 .54 .57 .58 .57 .58 .57 .55	70.0 69.9 68.6 70.5 68.6 70.4 70.0 69.4 69.5 69.5 67.4	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2 7.6 6.9 7.0 6.6 7.0	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0 12.8 11.8 12.4 13.1 11.9
Coker 801-N	1.17 1.16 1.15 1.17 1.18 1.15 1.19 1.14 1.18 1.18 1.17 1.14	50% 0.56 .54 .59 .54 .57 .54 .57 .58 .57 .55 .56 .54 .55	70.0 69.9 68.6 70.5 68.6 70.4 70.0 69.4 69.5 69.5 67.4 69.6 70.6	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2 7.6 6.9 7.0 6.6 7.0 7.3	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0 12.8 11.8 12.4 13.1 11.9 12.4
Coker 801-N Coker 600-B Coker 600-B Coker 600-B Coker 63-277-1B Coker 310 Coker 310	1.17 1.16 1.15 1.17 1.18 1.15 1.19 1.14 1.18 1.18 1.17 1.14	50% 0.56 .54 .59 .54 .57 .54 .57 .58 .57 .55 .56 .54 .55 .56	70.0 69.9 68.6 70.5 68.6 70.4 70.0 69.4 69.5 69.5 67.4 69.6 70.6 68.5	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2 7.6 6.9 7.0 6.6 7.0 7.3 7.1	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0 12.8 11.8 12.4 13.1 11.9 12.4 11.8
Stoneville 1181 PD 4548 Coker 801-N Coker 600-B Mo 63-277-1B Stoneville 213 PD 4585 Mo 74-944 McNair 3151 Coker 310 Stoneville 1395 Ga T 72-56 Ga T 73-347863 Coker 6118 Deltapine 7559-6139 Acala SJ-5	1.17 1.16 1.15 1.17 1.18 1.15 1.19 1.14 1.18 1.18 1.17 1.14	50% 0.56 .54 .59 .54 .57 .54 .57 .58 .57 .55 .56 .54 .55	70.0 69.9 68.6 70.5 68.6 70.4 70.0 69.4 69.5 69.5 67.4 69.6 70.6	Hunter's b value 7.0 6.8 6.9 7.0 7.3 7.1 7.2 7.6 6.9 7.0 6.6 7.0 7.3	tenacity (cN/tex) 12.0 13.8 12.7 12.7 12.9 11.8 13.0 12.8 11.8 12.4 13.1 11.9 12.4

Table 103.--High-quality test: Yield, boll, and spinning data for Rohwer, Ark.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 1395	1220 a	NA	36.2	NA	4.55
Coker 600-B	1030 ab	NA	39.3	NA	4.35
Stoneville 213	953 abc	NA	38.1	NA	4.35
Mo. 74-944	908 abc	NA	34.4	NA	4.60
Mo. 63-277-1B	907 abc	NA	33.2	NA	4.20
Ga T 73-347863	901 abc	NA	41.3	NA	4.30
Coker 310	883 abc	NA	35.8	NA	4.95
Coker 801-N	851 abc	NA	36.8	NA	4.35
Stoneville 1181	851 abc	NA	34.0	NA	4.40
Deltapine 7559-6139	845 abc	NA	35.8	NA	4.50
Coker 6118	833 abc	NA	37.3	NA	4.75
Ga T 72-56	830 abc	NA	37.2	NA	5.00
McNair 3151	790 bc	NA	35.4	NA	4.45
PD 4585	659 bc	NA	36.4	NA	5.00
PD 4548	639 bc	NA	36.0	NA	4.75
Acala SJ-5	595 c	NA	41.4	NA	4.65
	Span length (Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 1395	1.12	0.56	76.6	8.8	12.1
Coker 600-B	1.21	•58	77.0	9.1	13.8
Stoneville 213	1.17	•56	77.7	8.9	12.1
Mo. 74-944	1.11	• 54	76.7	8.8	11.9
Mo. 63-277-1B	1.20	• 57	77.2	8.5	12.8
Ga T 73-347863	1.19	• 54	75.3	9.0	13.7
Coker 310	1.18	•58	76.4	8.9	13.6
Coker 801-N	1.18	•57	76.0	8.5	12.8
Stoneville 1181	1.17	• 55	77.2	8.4	12.4
Deltapine 7559-6139	1.24	•59	73.5	8.2	12.4
Coker 6118	1.19	•58	73.4	8.8	12.9
Ga T 72-56	1.16	•59	75.0	8.6	13.0
McNair 3151	1.17	• 56	76.1	9.0	11.8
PD 4585	1.16	•56	76.0	9.2	12.8
PD 4548	1.19	•58	76.3	9.3	12.1
Acala SJ-5	1.14	• 54	74.9	8.7	13.5

Table 104.--High-quality test: Yield, boll, and spinning data for Portageville, Mo.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Mo. 63-277-1B	1188 a	6.95	39.8	12.0	4.65
Mo. 74-944	1031 Ъ	7.40	38.5	13.3	4.75
McNair 3151	1022 Ъ	7.40	36.6	13.4	5.10
Coker 600-B	1021 ь	6.60	40.7	12.9	5.00
Stoneville 1181	1002 Ъ	5.85	36.1	12.8	5.05
а Т 72-56	990 ь	7.05	39.1	12.9	5.15
eltapine 7559-6139	950 bc	7.50	35.8	14.8	4.15
а Т 73-347863	941 bcd	6.75	40.6	12.3	4.95
toneville 1395	908 bcd	6.55	40.3	13.2	5.35
oker 6118	893 bcd	6.25	38.0	12.2	5.50
oker 310	879 bcd	7.30	37.9	12.4	4.90
oker 801-N	858 bvd	7.45	38.3	13.4	5.10
toneville 213	796 cd	6.50	35.9	13.3	5.05
PD 4585	785 cd	6.35	38.7	14.2	5.00
D 4548	769 d	6.45	40.2	13.7	5.00
Acala SJ-5	570 e	7.20	37.5	13.8	4.65
		•			
	Span length (inches)	Colorimeter		Yarn
					
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
40 • 63-277-1B ••••				b value	(cN/tex)
	1.20	0.57	69.3	b value 8.7	(cN/tex)
o. 74-944	1.20 1.17	0.57 .57	69.3 69.3	8.7 8.6	(cN/tex) 13.4 13.4
o. 74-944 eNair 3151	1.20 1.17 1.19	0.57 .57 .58	69.3 69.3 68.6	8.7 8.6 8.1	(cN/tex) 13.4 13.4 12.7
o. 74-944 cNair 3151 oker 600-B	1.20 1.17 1.19 1.23	0.57 .57 .58 .56	69.3 69.3 68.6 68.7	8.7 8.6 8.1 8.4	(cN/tex) 13.4 13.4 12.7 12.8
o. 74-944 cNair 3151 oker 600-B toneville 1181	1.20 1.17 1.19 1.23 1.20	0.57 .57 .58 .56	69.3 69.3 68.6 68.7 68.9	8.7 8.6 8.1 8.4 8.1	(cN/tex) 13.4 13.4 12.7 12.8 13.4
o. 74-944	1.20 1.17 1.19 1.23 1.20 1.17	0.57 .57 .58 .56 .56	69.3 69.3 68.6 68.7 68.9 69.2	8.7 8.6 8.1 8.4 8.1 8.4	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3
o. 74-944	1.20 1.17 1.19 1.23 1.20 1.17 1.28	0.57 .57 .58 .56 .56 .55	69.3 69.3 68.6 68.7 68.9 69.2 71.6	8.7 8.6 8.1 8.4 8.1 8.4	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0
co. 74-944	1.20 1.17 1.19 1.23 1.20 1.17 1.28 1.23	0.57 .57 .58 .56 .56 .55 .59	69.3 69.3 68.6 68.7 68.9 69.2 71.6 69.1	8.7 8.6 8.1 8.4 8.1 8.4 8.4	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0 13.9
Co. 74-944	1.20 1.17 1.19 1.23 1.20 1.17 1.28 1.23 1.20	0.57 .57 .58 .56 .56 .55 .59 .57	69.3 69.3 68.6 68.7 68.9 69.2 71.6 69.1 68.8	8.7 8.6 8.1 8.4 8.1 8.4 8.4 8.6 8.6	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0 13.9 13.8
Co. 74-944	1.20 1.17 1.19 1.23 1.20 1.17 1.28 1.23 1.20 1.18	0.57 .57 .58 .56 .56 .55 .59 .57 .58	69.3 69.3 68.6 68.7 68.9 69.2 71.6 69.1 68.8 67.2	8.7 8.6 8.1 8.4 8.4 8.4 8.6 8.6 9.0	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0 13.9 13.8 12.4
Coker 600-B	1.20 1.17 1.19 1.23 1.20 1.17 1.28 1.23 1.20 1.18	0.57 .57 .58 .56 .56 .55 .59 .57 .58 .56	69.3 69.3 68.6 68.7 68.9 69.2 71.6 69.1 68.8 67.2 69.5	8.7 8.6 8.1 8.4 8.1 8.4 8.6 8.6 9.0 8.3	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0 13.9 13.8 12.4 13.0
Coker 600-B	1.20 1.17 1.19 1.23 1.20 1.17 1.28 1.23 1.20 1.18 1.22 1.17	0.57 .57 .58 .56 .56 .55 .59 .57 .58 .56	69.3 69.3 68.6 68.7 68.9 69.2 71.6 69.1 68.8 67.2 69.5 69.1	8.7 8.6 8.1 8.4 8.4 8.4 8.6 8.6 9.0 8.3 8.6	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0 13.9 13.8 12.4 13.0 13.0
Ac Nair 3151	1.20 1.17 1.19 1.23 1.20 1.17 1.28 1.23 1.20 1.18 1.22 1.17	0.57 .57 .58 .56 .56 .55 .59 .57 .58 .56 .56	69.3 69.3 68.6 68.7 68.9 69.2 71.6 69.1 68.8 67.2 69.5 69.1	8.7 8.6 8.1 8.4 8.1 8.4 8.6 8.6 9.0 8.3 8.6 8.9	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0 13.9 13.8 12.4 13.0 13.0 13.0
Ac Nair 3151	1.20 1.17 1.19 1.23 1.20 1.17 1.28 1.23 1.20 1.18 1.22 1.17	0.57 .57 .58 .56 .56 .55 .59 .57 .58 .56 .56	69.3 69.3 68.6 68.7 68.9 69.2 71.6 69.1 68.8 67.2 69.5 69.1 69.7	8.7 8.6 8.1 8.4 8.1 8.4 8.6 8.6 9.0 8.3 8.6 8.9 8.5	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0 13.9 13.8 12.4 13.0 13.0 13.0
Mo. 63-277-1B Mo. 74-944 McNair 3151 Coker 600-B Stoneville 1181 Ga T 72-56 Deltapine 7559-6139 Ga T 73-347863 Stoneville 1395 Coker 6118 Coker 310 Coker 801-N Stoneville 213 PD 4585 PD 4548 Acala SJ-5	1.20 1.17 1.19 1.23 1.20 1.17 1.28 1.23 1.20 1.18 1.22 1.17	0.57 .57 .58 .56 .56 .55 .59 .57 .58 .56 .56	69.3 69.3 68.6 68.7 68.9 69.2 71.6 69.1 68.8 67.2 69.5 69.1	8.7 8.6 8.1 8.4 8.1 8.4 8.6 8.6 9.0 8.3 8.6 8.9	(cN/tex) 13.4 13.4 12.7 12.8 13.4 13.3 13.0 13.9 13.8 12.4 13.0 13.0 13.0

Table 105.--High-quality test: Yield, boll, and spinning data for Jackson, Tenn.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronair reading
Mo. 63-277-1B	1085 a	6.18	37.1	11.2	4.35
Coker 600-B	986 Ъ	5.81	36.8	11.7	4.45
Stoneville 213	956 bc	5.58	33.0	11.7	4.50
Ga T 72-56	939 bcd	5.51	37.7	10.8	4.25
a T 73-347863	936 bcd	5.90	34.8	12.3	4.50
toneville 1181	926 bcde	5.23	31.8	12.3	4.60
oker 310	909 bcde	5.97	35.5	11.6	4.10
cNair 3151	905 bcdef	6.29	34.7	12.0	4.85
oker 6118	889 cdef	5.36	35.5	12.0	4.70
D 4548	876 cdef	5.40	38.8	11.6	4.40
toneville 1395	858 def	5.62	36.5	12.3	4.85
0. 74-944	837 ef	5.75	34.6	11.8	3.80
oker 801-N	814 f	6.57	35.9	12.2	4.40
D 4585	712 g	5.96	36.6	11.7	4.50
eltapine 7559-6139	694 g	6.59	31.8	13.9	3.50
cala SJ-5	489 h	6.38	36.0	11.6	4.00
	Span length (imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
63-277-1B · · · · · ·	1.23	0.61	73.6	9.1	12.7
Coker 600-B	1.23	•57	73.6	9.3	12.1
toneville 213	1.14	• 54	74.5	9.4	12.1
ат 72-56	1.19	•55	73.5	9.4	12.1
а т 73-347863	1.18	• 58	74.4	9.1	12.3
toneville 1181	1.18	•57	74.7	9.6	12.8
oker 310	1.20	• 56	74.0	9.6	11.8
cNair 3151	1.16	•56	73.1	8.7	12.0
oker 6118	1.19	• 55	73.0	9.5	11.9
D 4548	1.17	•56	70.7	9.8	12.2
toneville 1395	1.19	• 57	70.9	9.3	12.2
0. 74-944	1.15	•58	72.6	9.7	12.4
oker 801-N	1.18	•59	73.7	9.0	13.3
OVET OUT IN *****	1.16	•57	73.1	9.7	12.4
D 4585		• 51	, 5 ,		
		5.5	74.8	9.4	13.0
PD 4585	1.23 1.17	•55 •60	74.8 74.2	9.4 9.0	13.0 14.5

Table 106.--High-quality test: Seed data for Jackson, Tenn.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Mo. 63-277-1B	21.6	3.42	1.18	12.9	4.0
Coker 600-B	21.7	3.45	1.01	15.6	3.5
Stoneville 213	19.4	3.12	• 92	15.0	4.0
Ga T 72-56	19.5	3.40	.89	14.8	3.5
Ga T 73-347863	19.6	3.21	•80	13.4	3.5
Stoneville 1181	20.8	3.25	1.17	12.5	3.5
Coker 310	19.5	3.25	1.00	14.4	4.0
McNair 3151	19.4	3.09	•91	14.7	4.0
Coker 6118	20.7	3.10	•49	13.6	4.0
PD 4548	21.4	3.45	•93	14.4	3.5
Stoneville 1395	22.3	3.38	1.28	13.3	2.5
Mo. 74-944	20.4	3.54	1.12	11.5	3.5
Coker 801-N	20.5	3.27	1.06	11.8	4.0
PD 4585	21.3	3.39	. 85	13.9	3.5
Deltapine 7559-6139	19.0	3.26	1.15	11.0	3.5
Acala SJ-5	21.2	3.44	• 82	10.1	5.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Mo • 63-277-1B • • • • • •	95.9	110.0	1.072	2.0	10.3
Coker 600-B	94.9	109.2	1.061	2.5	10.1
Stoneville 213	107.9	118.9	•966	4.5	10.4
Ga T 72-56	93.8	108.3	•990	8.0	9.3
Ga T 73-347863	109.9	124.0	•995	2.3	10.9
Stoneville 1181	111.9	121.9	•996	2.0	11.1
Coker 310	99.0	112.3	.971	7.8	9.6
McNair 3151	109.6	120.2	•984	5.0	10.8
Coker 6118	104.8	116.7	1.011	5.8	10.6
PD 4548	97.8	111.4	1.036	5.0	10.1
Stoneville 1395	110.5	120.8	1.024	3.8	11.3
Mo. 74-944	103.1	115.4	1.024	7.5	10.8
Coker 801-N	110.6	120.9	•998	3.5	11.0
PD 4585	103.3	115.6	1.016	5.0	10.5
Deltapine 7559-6139	135.2	138.2	•953	9.0	12.9
Acala SJ-5	106.9	118.1	1.026	7.3	11.0

Table 107.--High-quality test: Yield, boll, and spinning data for Belle Mina, Ala.

Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
	6.05	41.5	NA	5.20
		38.5	NA	5.50
	6.66	37.2	NA	5.15
940 ab	5.55	39.9	NA	5.50
939 ab	5.80	40.1	NA	5.30
908 abc	5.43	41.4	NA	5.05
907 abc	5.29	41.0	NA	5.00
879 abc	5.58	39.8	NA	4.90
879 abc	5.27	39.8	NA	5.10
878 abc	6.62	38.4		4.50
845 bc	5.98	38.9		5.50
834 bc				4.95
				4.90
				5.55
				4.85
				4.35
307 4	34.13	3001	1411	1.33
Span length (inches)	Color	imeter	Yarn
2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
7	0.55	74.0	0.7	1 / 0
				14.2
				12.2
				11.5
				11.2
1.15	• 56			12.3
1.21	•55	73.3	8.5	12.5
1.16	• 54	73.6	9.1	12.9
1.14	•55	74.6	8.6	12.4
	•55 •59	74.6 74.9	8.6 9.0	12.4 12.3
1.14				
1.14 1.22	• 59	74.9	9.0	12.3
1.14 1.22 1.20 1.14	• 59 • 52 • 55	74.9 76.9	9.0 9.1	12.3 11.8
1.14 1.22 1.20 1.14 1.10	• 59 • 52 • 55 • 55	74.9 76.9 74.8 72.6	9.0 9.1 9.4	12.3 11.8 10.6
1.14 1.22 1.20 1.14 1.10	• 59 • 52 • 55 • 55 • 54	74.9 76.9 74.8 72.6 73.5	9.0 9.1 9.4 9.2 9.3	12.3 11.8 10.6 12.7 12.5
1.14 1.22 1.20 1.14 1.10	• 59 • 52 • 55 • 55	74.9 76.9 74.8 72.6	9.0 9.1 9.4 9.2	12.3 11.8 10.6 12.7
	1020 a 1011 a 958 ab 940 ab 939 ab 908 abc 907 abc 879 abc 879 abc 878 abc 845 bc 834 bc 830 bc 822 bc 770 c 339 d Span length (2.5% 1.17 1.16 1.15 1.14 1.15	(1b/acre) (g/boll) 1020 a 6.05 1011 a 5.44 958 ab 6.66 940 ab 5.55 939 ab 5.80 908 abc 5.43 907 abc 5.29 879 abc 5.58 879 abc 5.27 878 abc 6.62 845 bc 5.98 834 bc 6.73 830 bc 6.15 822 bc 5.53 770 c 6.05 339 d 5.43 Span length (inches) 2.5% 50% 1.17 0.55 1.16 .56 1.15 .53 1.14 .53 1.15 .56 1.21 .55	(1b/acre) (g/boll) percent 1020 a 6.05 41.5 1011 a 5.44 38.5 958 ab 6.66 37.2 940 ab 5.55 39.9 939 ab 5.80 40.1 908 abc 5.43 41.4 907 abc 5.29 41.0 879 abc 5.58 39.8 879 abc 5.27 39.8 878 abc 6.62 38.4 845 bc 5.98 38.9 834 bc 6.73 39.4 830 bc 6.15 39.6 822 bc 5.53 41.6 770 c 6.05 39.7 339 d 5.43 38.4 Span length (inches) Color 2.5% 50% 74.9 1.16 .56 74.9 1.15 .53 73.6 1.14 .53 71.1 1.15 .56 74.4 1.21 .55 73.3	(1b/acre) (g/boll) percent index 1020 a 6.05 41.5 NA 1011 a 5.44 38.5 NA 958 ab 6.66 37.2 NA 940 ab 5.55 39.9 NA 939 ab 5.80 40.1 NA 908 abc 5.43 41.4 NA 907 abc 5.29 41.0 NA 879 abc 5.58 39.8 NA 879 abc 5.58 39.8 NA 878 abc 6.62 38.4 NA 845 bc 5.98 38.9 NA 834 bc 6.73 39.4 NA 830 bc 6.15 39.6 NA 822 bc 5.53 41.6 NA 770 c 6.05 39.7 NA 339 d 5.43 38.4 NA Span length (inches) 2.5% 50% Colorimeter Rd Hunter's b value 1.17 0.55 74.9 8.8 1.15 .56 74.9 8.8 1.14 .53 71.1 9.5 1.15 .56 74.4

NA, Data not available.

Table 108.--High-quality test: Seed data for Belle Mina, Ala.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
PD 4548	22.3	3.20	1.17	NA	3.5
Stoneville 1181	23.1	2.95	1.43	NA	4.0
McNair 3151	20.2	2.92	1.10	NA	3.5
Coker 6118	21.7	3.25	• 44	NA	3.5
Ga T 72-56	20.6	3.19	1.03	NA	3.5
Ga T 73-347863	21.7	3.26	1.15	NA	3.5
PD 4585	22.7	3.04	1.03	NA	4.0
Coker 801-N	22.3	3.07	1.20	NA	4.0
Coker 600-B	22.9	3.31	1.25	NA	4.0
Deltapine 7559-6139	20.4	3.18	1.17	NA	4.0
Stoneville 213	21.3	3.03	1.30	NA	3.5
Mo. 74-944	22.2	3.21	1.27	NA	4.0
Coker 310	21.9	3.23	1.21	NA	3.5
Stoneville 1395	23.9	3.37	1.48	NA	4.0
Mo. 63-277-1B	22.0	3.37	1.28	NA	3.5
Acala SJ-5	21.7	3.31	•86	NA	3.5

NA, Data not available.

Table 109. -- High-quality test: Yield, boll, and spinning data for Florence, S. C.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Stoneville 1181	953 a	5.10	38.7	10.9	5.70
Ga T 72-56	945 a	6.24	40.1	11.4	5.45
Ga T 73-347863	938 a	5.98	40.8	11.1	5.35
PD 4548	929 a	5.47	42.6	11.0	5.50
Stoneville 1395	914 ab	5.86	42.3	11.9	6.00
Coker 600-B	913 ab	5.39	40.7	11.1	5.50
Stoneville 213	900 ab	5.30	39.7	10.4	5.85
oker 310	894 ab	5.75	39.5	11.0	5.50
Coker 801-N	883 ab	5.89	39.9	11.0	5.50
PD 4585	864 ab	5.82	40.7	11.0	5.55
Coker 6118	855 ab	5.70	40.0	11.2	5.80
McNair 3151	854 ab	6.47	37.7	12.1	5.65
10. 74-944	851 ab	6.60	39.4	11.3	5.25
4o. 63-277-1B	784 bc	5.76	39.8	11.2	5.30
Deltapine 7559-6139	673 cd	6.02	35.9	14.1	4.85
Acala SJ-5	587 d	6.57	38.4	12.0	5.10
	Span length (inches)		imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 1181	1.17	0.57	75.0	9.1	12.6
Ga T 72-56	1.10	•51	75.9	8.5	12.8
Ga T 73-347863	1.18	• 57	74.4	8.7	12.9
PD 4548	1.17	•57	74.8	9.1	13.5
Stoneville 1395	1.16	•58	74.0	9.0	13.5
Coker 600-B	1.15	•53	75.7	9.2	12.7
,	1.08	• 52	76.3	9.4	11.2
Stoneville 213					
			75.8	9.0	13.0
Coker 310	1.13	• 53	75.8 76.1	9.0 9.2	13.0 12.7
Coker 310 Coker 801-N	1.13 1.11	•53 •55	76.1	9.2	12.7
Coker 310 Coker 801-N PD 4585	1.13 1.11 1.14	•53 •55 •52	76.1 75.6	9•2 8•9	12.7 13.8
Coker 310	1.13 1.11 1.14 1.14	•53 •55 •52 •53	76.1 75.6 75.5	9.2 8.9 9.5	12.7 13.8 11.5
Coker 310	1.13 1.11 1.14 1.14 1.15	•53 •55 •52 •53 •55	76.1 75.6 75.5 74.6	9.2 8.9 9.5 8.4	12.7 13.8 11.5 12.1
Coker 310	1.13 1.11 1.14 1.14 1.15 1.12	•53 •55 •52 •53 •55	76.1 75.6 75.5 74.6 73.5	9.2 8.9 9.5 8.4 9.3	12.7 13.8 11.5 12.1 12.6
Stoneville 213 Coker 310 Coker 801-N PD 4585 Coker 6118 McNair 3151 Mo 74-944 Deltapine 7559-6139	1.13 1.11 1.14 1.14 1.15	•53 •55 •52 •53 •55	76.1 75.6 75.5 74.6	9.2 8.9 9.5 8.4	12.7 13.8 11.5 12.1

Table 110.--High-quality test: Seed data for Florence, S. C.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Stoneville 1181	21.6	2.76	1.47	NA	4.0
Ga T 72-56	20.4	3.12	•99	NA	4.0
Ga T 73-347863	21.2	3.28	•93	NA	3.5
PD 4548	23.2	3.26	1.18	NA	4.0
Stoneville 1395	23.8	3.39	1.52	NA	4.5
Coker 600-B	22.6	3.22	1.22	NA	4.0
Stoneville 213	21.2	2.96	1.31	NA	4.0
Coker 310	21.6	3.02	1.06	NA	4.0
Coker 801-N	21.0	3.07	1.08	NA	4.5
PD 4585	22.9	3.15	•95	NA	4.0
Coker 6118	21.6	2.99	•48	NA	4.0
McNair 3151	20.1	2.86	1.02	NA	4.0
Mo. 74-944	22.7	3.16	1.33	NA	4.0
Mo. 63-277-1B	23.3	3.25	1.36	NA	4.5
Deltapine 7559-6139	21.1	3.17	1.25	NA	4.0
Acala SJ-5	23.5	3.32	•78	NA	4.0

NA, Data not available.

Table 111.--High-quality test: Yield, boll, and spinning data for Stoneville, Miss.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint	Seed	Micronair
	(10/ acre)	(8/0011)	percent	index	reading
Mo. 74-944	935 a	6.12	38.9	12.5	4.55
Mo. 63-277-1B	881 a	6.02	38.9	12.0	4.85
Stoneville 1181	764 Ъ	5.76	37.0	12.2	5.45
Deltapine 7559-6139	688 bc	6.66	36.3	14.7	4.45
oker 801-N	668 bc	5.99	39.3	12.2	5.05
koker 310	637 cd	6.06	39.0	12.1	5.00
toneville 213	633 cd	6.55	38.0	12.3	5.45
oker 600-B	633 cd	6.00	39.0	11.7	4.85
cNair 3151	617 cd	6.56	35.3	12.4	5.00
а т 72-56	593 cd	6.12	38.8	12.1	5.15
toneville 1395	576 cd	5.88	39.5	12.7	5.35
D 4548	539 d	5.83	41.5	12.2	5.30
а Т 73-347863	535 d	5.94	40.1	11.9	4.85
oker 6118	526 d	5.93	38.3	12.8	5.55
D 4585	387 e	6.63	39.2	12.9	5.05
cala SJ-5	105 f	6.04	36.2	12.3	4.50
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
1o · 74-944 · · · · · · · ·	1.18	0.60	75•5	8.8	14.5
lo. 63-277-1B	1.21	•59	74.5	8.7	14.2
toneville 1181	1.23	•60	73.5	8.7	14.1
eltapine 7559-6139	1.28	•58	76.5	8.3	13.8
oker 801-N	1.19	•59	74.2	8.6	14.0
oker 310 ·····	1.26	•60	74.8	8.6	14.2
toneville 213		• 55	74.8	9.0	13.0
	1.15		75.5	8.7	13.7
oker 600-B	1.26	•62		9.0	13.7
cNair 3151	1.20	• 59	75.5 75.2	8.2	14.0
a T 72-56	1.16	•57			
toneville 1395 ···	1.24	•63	76.4	8.4	14.7
D 4548	1.22	• 60	74.3	8.8	15.2
а Т 73-347863	1.24	•59	75.0	9.1	13.9
oker 6118	1.18	• 54	71.3	8.8	13.0
	1.22	•60	74.0	8.8	14.2
PD 4585	1.17	•56	73.8	9.3	15.1

Table 112.--High-quality test: Yield, boll, and spinning data for Tifton, Ga.

Variety	Lint yield	Boll size	Lint	Seed	Micronaire
	(1b/acre)	(g/boll)	percent	index	reading
Coker 600-B	834 a	5.81	39.9	11.2	4.60
Ga T 72-56	759 ab	5.92	39.6	12.0	4.75
Coker 6118	744 ab	5.58	39.6	12.4	5.40
Coker 310	743 ab	6.16	40.8	11.1	5.00
McNair 3151	736 ab	5.68	38.0	12.3	5.00
6. 63-277-1B	736 ab	6.43	38.5	11.6	4.30
0. 74-944	722 abc	6.42	38.4	11.8	4.35
oker 801-N	721 abc	5.07	39.2	11.3	4.85
Stoneville 1181	709 abc	4.93	38.4	12.2	5.00
Stoneville 1395	703 abc	5.88	41.9	12.0	5.35
D 4585	702 abc	5.19	39.6	11.8	4.75
Stoneville 213	691 bc	5.46	39.6	11.7	5.15
Ga T 73-347863	683 bc	6.14	41.7	11.2	4.85
Deltapine 7559-6139	638 bc	6.66	36.3	14.5	4.20
PD 4548	591 c	5.59	41.0	11.9	4.60
Acala SJ-5	257 d	4.24	41.1	10.8	4.50
	Span length (imeter	Yarn
	2.5%	50%	R_d	Hunter's	tenacity
				<i>b</i> value	(cN/tex)
Coker 600-B	1.18	0.57	75.0	9.1	12.6
Ga T 72-56	1.14	• 54	73.4	8.6	12.2
Coker 6118	1.14	•55	72.8	9.2	12.2
oker 310	1.17	•56	74.1	9.6	13.1
cNair 3151	1.17	• 56	74.4	9.1	12.6
o. 63-277-1B	1.19	•58	74.1	9.8	13.5
0. 74-944	1.16	• 59	75.4	9.5	13.2
oker 801-N	1.13	•57	74.0	8.7	12.3
toneville 1181	1.19	•58	74.9	9.3	12.9
Stoneville 1395	1.17	•58	75.2	9.2	13.3
PD 4585	1.22	•59	75.2	9.7	13.5
Stoneville 213	1.13	•55	74.8	9.3	12.0
Ga T 73-347863	1.22	•59	73.7	9.4	13.1
Deltapine 7559-6139	1.24	•58	75.5	9.2	13.2
*	1.22	•59	74.3	8.8	13.9
ነከ					
PD 4548	1.12	• 54	75.2	9.2	13.4

Table 113.--High-quality test: Yield, boll, and spinning data for Rocky Mount, N. C.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Chamoud 11 a 1101	4.93	5 /.7	20.1	10 5	
Stoneville 1181	483 a	5.47	38.1	10.5	5.70
Ga T 72-56 Coker 600-B	431 ab	5.98	39.9	11.0	5.40
Stoneville 1395	425 ab 425 ab	5.29	40.1	10.7	5.25
McNair 3151	425 ab	5.40	40.7	11.2	5.85
Mo. 74-944		6.45	37.7	11.0	5.60
	391 bcd	5.69	38.7	10.5	5.00
Coker 310	387 bcd	5.69	39.8	10.8	5.50
Mo. 63-277-1B	383 bcd	5.90	40.4	10.4	5.10
PD 4548	380 bcd	5.15	41.5	10.8	5.10
Coker 801-N	370 bcd	5.80	39.6	10.9	5.55
Stoneville 213	367 bcd	5.74	38.9	10.1	5.65
PD 4585	353 cde	5.40	40.2	10.8	5.50
Deltapine 7559-6139	347 cd	6.15	35.4	13.3	4.65
Ga T 73-347863	341 de	5.63	40.6	10.0	5.35
Coker 6118	296 e	5.72	38.7	11.0	5.95
Acala SJ-5	153 f	6.75	36.2	10.6	4.95
	Span length (inches)		Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Stoneville 1181	1.15	0.56	72.9	8.3	12.2
Ga T 72-56	1.07	• 52	73.6	8.5	12.7
Coker 600-B	1.17	• 56	73.8	8.6	12.9
Stoneville 1395	1.17	•59	72.5	9.0	12.8
McNair 3151	1.09	• 54	71.4	8.1	11.2
Mo. 74-944	1.11	•56	73.4	9.1	12.4
10. /4 /44	1.15	•56	72.7	9.2	12.1
Coker 310					
				9.11	11.8
Mo. 63-277-1B	1.11	• 53	72.6 74.9	9.0 8.7	11.8
Mo. 63-277-1B PD 4548	1.11 1.12	• 53 • 54	74.9	8.7	13.5
Mo. 63-277-1B PD 4548 Coker 801-N	1.11 1.12 1.13	• 53 • 54 • 57	74.9 72.9	8.7 9.1	13.5 11.9
Coker 310	1.11 1.12 1.13 1.06	• 53 • 54 • 57 • 53	74.9 72.9 74.5	8.7 9.1 9.0	13.5 11.9 11.6
Mo. 63-277-1B PD 4548 Coker 801-N Stoneville 213 PD 4585	1.11 1.12 1.13 1.06 1.13	5354575357	74.9 72.9 74.5 73.9	8.7 9.1 9.0 8.9	13.5 11.9 11.6 12.8
Mo. 63-277-1B PD 4548 Coker 801-N Stoneville 213 PD 4585 Deltapine 7559-6139	1.11 1.12 1.13 1.06 1.13 1.22	 53 54 57 53 57 57 	74.9 72.9 74.5 73.9 75.8	8.7 9.1 9.0 8.9 8.4	13.5 11.9 11.6 12.8 13.0
Mo. 63-277-1B PD 4548 Coker 801-N Stoneville 213 PD 4585 Deltapine 7559-6139 Ga T 73-347863	1.11 1.12 1.13 1.06 1.13 1.22 1.14	 53 54 57 53 57 57 54 	74.9 72.9 74.5 73.9 75.8 74.5	8.7 9.1 9.0 8.9 8.4 8.8	13.5 11.9 11.6 12.8 13.0 13.2
Mo. 63-277-1B PD 4548 Coker 801-N Stoneville 213 PD 4585 Deltapine 7559-6139	1.11 1.12 1.13 1.06 1.13 1.22	 53 54 57 53 57 57 	74.9 72.9 74.5 73.9 75.8	8.7 9.1 9.0 8.9 8.4	13.5 11.9 11.6 12.8 13.0

PIMA REGIONAL COTTON VARIETY TEST

Table 114.--Pima test: Yield, boll, and spinning data by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-44	888 a	3.27 c	37.0 f	11.6 e	4.55 c
P-34	849 a	3.24 c	40.6 a	12.5 b	4.75 a
E-17	849 a	3.44 abc	38.2 d	11.7 d	4.39 d
E-14	844 a	3.47 abc	37.4 e	12.2 c	4.65 b
E-15	842 a	3.29 bc	38.2 d	11.7 d	4.40 d
E-16	821 a	3.39 abc	38.1 d	11.7 de	4.30 e
E-13	812 a	3.53 abc	38.3 d	12.1 c	4.50 c
P-43	803 a	3.56 ab	37.3 e	13.1 a	4.71 a
Pima S-5	791 a	3.61 a	38.8 c	12.2 c	4.43 d
P-42	733 a	3.32 bc	39.2 Ъ	11.7 de	4.41 d
	Span length (inches)	Color	rimeter	Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
P-44	1.38 c	0.64 e	67.6 ab	11.1 e	17.0 de
P-34 '	1.36 d	.67 bc	64.7 d	11.9 a	18.4 a
E-17	1.37 cd	.66 cde	66.7 c	11.5 bc	17.4 bcd
E-14	1.40 b	•65 cde	65.1 d	11.6 Ъ	16.9 e
E-15	1.37 cd	•65 e	67.0 bc	11.4 cd	17.3 cde
E-16	1.40 b	•65 de	66.7 c	11.5 bc	17.5 bc
E-13	1.38 c	•64 e	66.3 c	11.4 bcd	16.9 de
P-43	1.38 bc	•69 a	66.9 bc	11.3 de	17.9 b
1 73 **********					
Pima S-5	1.39 bc	•67 bcd	67.8 a	11.4 bc	17.0 de

Table 115.--Pima test: Seed data by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-44	22.9 bc 22.5 c 23.3 b 23.3 b 23.4 b 23.2 b 23.4 b 24.5 a 23.3 b 23.2 b	3.48 cd 3.49 cd 3.59 a 3.48 cd 3.54 abc 3.57 ab 3.52 bc 3.44 d 3.49 cd 3.36 e	1.10 a .87 e 1.01 bc 1.09 a 1.05 ab 1.07 ab 1.02 bc .95 cd .92 de .86 e	2.9 ab 1.6 e 2.4 d 3.0 ab 2.4 cd 2.9 ab 2.9 ab 3.2 a 2.5 bcd 2.9 abc	12.7 b 13.5 a 12.8 b 12.7 b 12.8 b 12.8 b 12.8 b 12.9 b 12.9 b 12.7 b
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-44 P-34 E-17 E-14 E-15 E-16 E-13 P-43 Pima S-5 P-42	108.1 f 122.5 a 111.3 e 115.4 c 111.7 e 110.7 e 114.2 cd 123.4 a 118.3 b 112.5 de	119.1 f 129.4 a 121.4 e 124.3 c 121.6 e 120.9 e 123.5 cd 130.0 a 126.5 b 122.3 de	1.057 a 1.022 d 1.043 bc 1.045 bc 1.040 bc 1.049 ab 1.045 bc 1.036 c 1.021 d 1.013 d	2.4 cd 3.8 b 2.5 cd 1.7 d 2.5 cd 2.6 cd 2.1 d 2.5 cd 3.5 bc 5.2 a	11.4 d 12.5 b 11.6 d 12.1 c 11.6 d 11.6 d 11.9 c 12.8 a 12.0 c 11.4 d

Table 116.--Pima test: Yield, boll, and spinning data by test location

Location	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Marana, Ariz.					
(Station)	1045 a	3.41 bcd	38.7 d	11.4 f	4.53 de
Phoenix, Ariz	1042 a	2.81 e	36.0 j	11.4 f	4.32 g
Marana, Ariz.					
(Clark farm) ····	1037 a	3.70 a	37:0 h	12.7 a	4.61 bc
Salome, Ariz	1033 a	3.30 cd	38.0 f	11.9 e	4.18 h
Wenden, Ariz Safford, Ariz.	980 Ъ	3.26 d	38.3 e	12.0 de	4.36 fg
(Curtis farm)	963 Ъ	3.53 abc	40.9 a	10.9 g	4.78 a
Coolidge, Ariz	778 c	3.42 bcd	36.7 i	12.3 c	4.48 e
Las Cruces, N. Mex.	643 d	3.57 abc	37.3 g	12.7 a	4.73 a
El Paso, Tex Safford, Ariz.	639 d	3.44 bcd	40.3 b	12.1 d	4.39 f
(Station) Safford, Ariz.	623 d	3.67 ab	39.3 c	12.5 b	4.63 b
(Layton farm)	599 d	3.62 ab	38.2 e	12.6 ab	4.55 cd
Fabens, Tex	481 e	3.18 d	39.1 c	12.3 c	4.57 bcd
	Span length ((inches)		rimeter	Yarn
	2 5%	5 N V	T) -		A A A
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Marana, Ariz.	Z•J%	JU%	н _d		
Marana, Ariz. (Station)	1.40 b	0.67 bcd	66.2 d		
•				b value	(cN/tex)
(Station) Phoenix, Ariz	1.40 b	0.67 bcd	66.2 d	b value	(cN/tex)
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm)	1.40 b 1.40 b	0.67 bcd .68 ab	66.2 d 69.3 a	11.4 cde 11.3 e	(cN/tex) 16.8 c 18.7 a
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm) Salome, Ariz Wenden, Ariz	1.40 b 1.40 b 1.39 bcd 1.37 e	0.67 bcd .68 ab	66.2 d 69.3 a 65.0 e	11.4 cde 11.3 e	(cN/tex) 16.8 c 18.7 a 16.9 bc
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm) Salome, Ariz Wenden, Ariz Safford, Ariz.	1.40 b 1.40 b 1.39 bcd 1.37 e 1.39 bcde	0.67 bcd .68 ab .65 def .64 ef .66 cd	66.2 d 69.3 a 65.0 e 68.6 ab 68.0 bc	11.4 cde 11.3 e 11.5 bcd 11.6 bc 11.4 cde	16.8 c 18.7 a 16.9 bc 17.3 bc 17.4 bc
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm) Salome, Ariz Wenden, Ariz Safford, Ariz. (Curtis farm)	1.40 b 1.40 b 1.39 bcd 1.37 e 1.39 bcde	0.67 bcd .68 ab .65 def .64 ef .66 cd	66.2 d 69.3 a 65.0 e 68.6 ab 68.0 bc	11.4 cde 11.3 e 11.5 bcd 11.6 bc 11.4 cde	16.8 c 18.7 a 16.9 bc 17.3 bc 17.4 bc
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm) Salome, Ariz Wenden, Ariz (Curtis farm) Coolidge, Ariz	1.40 b 1.40 b 1.39 bcd 1.37 e 1.39 bcde 1.33 f 1.42 a	0.67 bcd .68 ab .65 def .64 ef .66 cd .63 f .69 a	66.2 d 69.3 a 65.0 e 68.6 ab 68.0 bc 64.0 f 68.1 bc	11.4 cde 11.3 e 11.5 bcd 11.6 bc 11.4 cde 11.8 a 11.4 de	16.8 c 18.7 a 16.9 bc 17.3 bc 17.4 bc 16.2 d 18.5 a
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm) Salome, Ariz Wenden, Ariz (Curtis farm) Coolidge, Ariz Las Cruces, N. Mex. El Paso, Tex	1.40 b 1.40 b 1.39 bcd 1.37 e 1.39 bcde	0.67 bcd .68 ab .65 def .64 ef .66 cd	66.2 d 69.3 a 65.0 e 68.6 ab 68.0 bc	11.4 cde 11.3 e 11.5 bcd 11.6 bc 11.4 cde	16.8 c 18.7 a 16.9 bc 17.3 bc 17.4 bc
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm) Salome, Ariz Wenden, Ariz (Curtis farm) Coolidge, Ariz Las Cruces, N. Mex. El Paso, Tex Safford, Ariz. (Station)	1.40 b 1.40 b 1.39 bcd 1.37 e 1.39 bcde 1.33 f 1.42 a 1.40 b	0.67 bcd .68 ab .65 def .64 ef .66 cd .63 f .69 a .66 bcd	66.2 d 69.3 a 65.0 e 68.6 ab 68.0 bc 64.0 f 68.1 bc 65.7 de	11.4 cde 11.3 e 11.5 bcd 11.6 bc 11.4 cde 11.4 de 11.6 b	16.8 c 18.7 a 16.9 bc 17.3 bc 17.4 bc 16.2 d 18.5 a 17.0 bc
(Station) Phoenix, Ariz Marana, Ariz. (Clark farm) Salome, Ariz Wenden, Ariz (Curtis farm) Coolidge, Ariz Las Cruces, N. Mex. El Paso, Tex Safford, Ariz.	1.40 b 1.40 b 1.39 bcd 1.37 e 1.39 bcde 1.33 f 1.42 a 1.40 b 1.37 cde	0.67 bcd .68 ab .65 def .64 ef .66 cd .63 f .69 a .66 bcd .64 ef	66.2 d 69.3 a 65.0 e 68.6 ab 68.0 bc 64.0 f 68.1 bc 65.7 de 65.8 de	11.4 cde 11.3 e 11.5 bcd 11.6 bc 11.4 cde 11.8 a 11.4 de 11.6 b 11.4 cde	16.8 c 18.7 a 16.9 bc 17.3 bc 17.4 bc 16.2 d 18.5 a 17.0 bc 17.0 bc

Table 117.--Pima test: Seed data by test location

Location	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Marana, Ariz.					
(Station)	25.7 a	3.05 h	1.02 cde	3.0 ab	13.0 ab
Phoenix, Ariz Marana, Ariz.	21.9 d	3.75 a	.87 g	2.9 b	11.5 d
(Clark farm)	24.2 Ъ	3.46 e	1.12 ab	3.0 ab	13.1 ab
Salome, Ariz	22.8 c	3.65 bc	1.00 def	1.9 d	12.8 ъ
Menden, Ariz Safford, Ariz.	22.3 cd	3.68 ъ	•89 g	2.4 c	13.0 ab
(Curtis farm)	24.1 ъ	3.48 e	1.09 abc	1.7 d	13.0 ab
Coolidge, Ariz	22.5 cd	3.76 a	•96 efg	3.0 ab	12.4 c
Las Cruces, N. Mex.	22.5 cd	3.57 d	.91 fg	3.1 ab	12.8 ъ
El Paso, Tex Safford, Ariz.	24.0 Ъ	3.16 g	.96 efg	2.7 bc	13.2 a
(Station) Safford, Ariz.	24.2 b	3.28 f	1.16 a	1.9 d	13.0 ab
(Layton farm)	22.8 c	3.59 cd	1.05 bcd	3.5 a	12.9 ab
Fabens, Tex	22.8 c	3.52 de	.93 efg	3.0 ab	13.0 ab
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed inde
Marana, Ariz.					
(Station)	109.6 d	120.1 d	1.039 cde	1.8 d	11.4 e
Phoenix, Ariz Marana, Ariz.	108.7 d	119.4 d	1.031 de	5•1 a	11.1 ef
(Clark farm)	119.1 ab	127.0 ъ	1.055 Ъ	1.9 d	12.6 a
Salome, Ariz	112.1 c	121.9 c	1.041 cd	3.4 Ъ	11.7 d
Wenden, Ariz Safford, Ariz.	113.3 c	122.9 c	1.034 cde	3.8 b	11.7 d
(Curtis farm)	106.3 e	117.8 e	1.031 de	2.5 cd	11.0 f
Coolidge, Ariz	112.2 c	122.1 c	1.071 a	3.7 b	12.0 c
Las Cruces, N. Mex.	120.7 a	128•1 a	1.029 e	3.2 bc	12.4 ab
El Paso, Tex Safford, Ariz.	116.9 в	125.4 b	1.028 e	1.9 d	12.0 c
(Station) Safford, Ariz.	120.4 a	127.9 a	1.027 e	2.3 d	12.4 ab
(Layton farm)	121.3 a	128.6 a	1.016 f	2.6 cd	12.3 Ъ
(Layton larm)					

Table 118.--Pima test: Combined yield, boll, and spinning data for Phoenix,
Marana (Station and Clark farm), Coolidge, Salome, and Wenden, Ariz.,
by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-34	1032 a	3.10	39.5	12.4	4.58
P-44	1020 a	3.14	36.0	11.5	4.48
Pima S-5	1015 a	3.54	38.0	12.2	4.33
E-17	1005 a	3.34	37.4	11.7	4.30
P-43	998 a	3.43	36.6	12.8	4.58
E-15	976 a	3.37	37.4	11.7	4.36
E-13	965 a	3.42	37.7	11.8	4.40
E-16	963 a	3.28	37.3	11.6	4.18
E-14	947 a	3.35	36.3	12.2	4.60
P-42	933 a	3.20	38.3	11.5	4.31
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
P-34	1.38	0.67	65.8	11.9	19.1
P-44	1.38	• 64	68.4	11.2	17.0
Pima S-5	1.40	•69	68.9	11.4	17.3
E-17	1.38	•66	67.3	11.5	17.6
2-43	1.39	.69	68.1	11.3	18.1
E-15	1.38	• 64	67.8	11.3	17.5
E-13	1.40	•65	67.1	11.4	17.2
E-16	1.41	•66	67.7	11.4	17.6
					17.1
E-14	1.41	•66	65.7	11.5	/ •

Table 119.--Pima test: Combined seed data for Phoenix, Marana (Station and Clark farm), Coolidge, Salome, and Wenden, Ariz., by cotton variety

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-34	22.5 22.8 23.2 23.4 24.9 23.3 23.3 23.2 23.0 22.9	3.55 3.56 3.58 3.67 3.45 3.61 3.59 3.63 3.55 3.41	0.88 1.03 .92 .99 .96 1.03 .97 1.04 1.07	1.5 2.9 2.5 2.5 3.3 2.4 3.0 3.3 3.1 2.8	13.3 12.6 12.8 12.5 12.1 12.6 12.6 12.6 12.6
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-34	120.4 106.0 118.1 109.2 118.7 110.1 111.1 108.9 114.0 108.8	127.9 117.4 126.3 119.8 126.7 120.5 121.2 119.6 123.4	1.028 1.067 1.032 1.054 1.044 1.045 1.055 1.055 1.052 1.054	4.8 2.5 4.0 3.0 2.6 3.0 2.2 2.5 2.1 6.0	12.4 11.3 12.1 11.5 12.4 11.5 11.7 11.5 12.0

Table 120.--Pima test: Combined yield, boll, and spinning data for El Paso and Fabens, Tex.; Las Cruces, N. Mex.; and Safford, Ariz. (Station, and Curtis and Layton farms), by cotton variety

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-44	756 a.	3.39	37.9	11.7	4.58
E-14	741 a	3.58	38.4	12.1	4.62
E-15	707 ab	3.48	39.0	11.8	4.35
E-17	692 abc	3.55	39.0	11.8	4.34
E-16	678 abc	3.50	38.9	11.9	4.23
P-34	666 abc	3.38	41.7	12.6	4.88
E-13	659 abc	3.64	38.9	12.4	4.49
P-43	609 bc	3.72	38.0	13.4	4.86
Pima S-5	583 с	3.67	39.7	12.2	4.44
P-42	533 d	3.43	40.2	11.9	4.44
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
P-44	1.37	0.65	66.9	11.1	16.9
E-14	1.39	•65	64.5	11.8	16.7
E-15	1.37	•65	66.3	11.4	17.1
E-17	1.36	•65	66.0	11.5	17.3
E-16	1.38	•65	65.7	11.6	17.4
P-34	1.34	•67	63.7	11.9	17.7
E-13	1.36	•63	65.5	11.5	16.6
P-43	1.38	•69	65.7	11.2	17.7
Pima S-5	1.37	•65	66.6	11.5	16.7
P-42	1.42	•68	66.4	11.4	17.1

Table 121.--Pima test: Combined seed data for El Paso and Fabens, Tex.; Las Cruces, N. Mex.; and Safford, Ariz. (Station, and Curtis and Layton farms), by cotton variety

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-44	23.1	3.40	1.16	3.0	12.8
E-14	23.6	3.40	1.25	2.9	12.8
E-15	23.6	3.48	1.08	2.5	13.1
E-17	23.2	3.52	1.04	2.3	13.0
E-16	23.3	3.50	1.10	2.5	13.0
P-34	22.6	3.43	•86	1.8	13.7
E-13	23.5	3.45	1.07	2.9	12.8
P-43	24.2	3.43	• 94	3.1	12.6
Pima S-5	23.5	3.40	•93	2.5	13.1
P-42	23.6	3.32	•85	3.0	13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-44	110.3	120.8	1.047	2 • 4	12.8
E-14	116.7	125.3	1.036	1.4	12.1
E-15	113.2	122.7	1.035	1.9	11.7
E-17	113.6	123.0	1.032	2.0	11.7
E-16	112.5	122.2	1.045	2.7	11.7
P-34	124.6	130.9	1.015	2.7	12.6
E-13	117.3	125.7	1.035	2.0	12.1
P-43	128.2	133.3	1.029	2.3	13.2
Pima S-5	118.6	126.6	1.010	3.1	12.0
P-42	116.2	125.0	1.007	4.5	11.7

Table 122.--Pima test: Yield, boll, and spinning data for Phoenix, Ariz.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Pima S-5	1231 a	3.11	37.8	11.1	4.40
P-43	1146 ab	3.02	35.7	12.0	4.60
P-44	1129 abc	2.79	34.0	11.3	4.50
P-34	1107 abcd	2.57	38.1	11.6	4.40
P-42	1074 bcde	2.67	37.7	10.4	4.25
E-13	987 cdef	2.93	35.3	11.8	4.10
E-15	973 def	2.83	36.1	11.2	4.30
E-17	954 ef	2.67	35.5	11.3	4.15
E-16	950 ef	2.76	35.6	11.3	4.10
E-14	867 f	2.72	34.5	11.7	4.40
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
Pima S-5	1.41	0.69	70.3	11.3	17.4
P-43	1.35	•66	68.7	11.4	19.3
P-44	1.38	•66	69.5	11.3	18.5
P-34	1.35	•67	66.6	11.6	20.2
P-42	1.41	•70	70.9	11.1	18.8
E-13	1.44	•67	69.5	11.2	18.6
	1 T T T				
	1.42	•70	69.2	11.1	19.2
E-15			69 . 2 70 . 1	11.1 11.5	19.2 18.5
E-15 E-17 E-16	1.42	.70			19.2 18.5 18.6

Table 123.--Pima test: Seed data for Phoenix, Ariz.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Pima S-5	22.3	3.67	0.85	2.2	12.5
P-43	24.5	3.70	•83	3.0	11.0
P-44	21.8	3.73	• 86	2.9	11.0
P-34	20.9	3.74	• 80	0.7	12.5
P-42	21.7	3.52	•81	2.5	11.5
E-13	22.1	3.81	.89	3.7	11.0
E-15	22.1	3.78	•91	3.1	11.5
E-17	21.1	3.94	• 90	2.6	11.0
E-16	21.6	3.93	• 93	4.2	11.0
E-14	21.1	3.69	• 93	4.4	11.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Pima S-5	113.2	122.8	1.044	6.3	11.3
P-43	113.1	122.7	1.033	3.3	11.7
P-44	102.9	115.2	1.050	4.3	10.8
P-34	113.5	123.0	1.002	8.8	11.4
P-42	102.7	115.1	1.006	8.0	10.3
E-13	110.2	120.6	1.030	3.5	11.3
E-15	104.1	116.2	1.042	4.5	10.8
E-17	109.0	120.0	1.044	5.0	11.4
E-16	105.0	116.8	1.047	2.5	11.0
E-14	113.4	123.0	1.010	5.3	11.5

Table 124.--Pima test: Yield, boll, and spinning data for Marana, Ariz. (Clark farm)

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-44	1162 a	3.44	36.1	11.9	4.65
P-34	1106 ab	3.50	39.5	13.1	4.90
E-17	1072 ab	3.75	37.2	12.3	4.50
P-42	1047 abc	3.54	37.6	12.1	4.50
E-15	1037 abc	3.83	36.6	12.6	4.50
P-43	1037 abc	3.70	36.3	13.6	4.70
E-16	1029 abc	3.75	36.5	12.4	4.40
E-13	1000 bc	3.86	37.5	12.6	4.55
Pima S-5	966 bc	3.88	36.6	13.4	4.50
E-14	914 c	3.76	36.3	13.0	4.90
	Span length (inches)		Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
P-44	1.37	0.61	66.6	10.9	16.8
P-34	1.37	•67	64.3	11.9	19.0
E-17	1.36	•62	65.1	11.5	17.2
P-42	1.44	• 66	66.6	11.5	16.6
E-15	1.38	•61	64.8	11.5	16.0
P-43	1.42	•70	65.6	11.6	16.8
E-16	1.39	•64	65.5	11.6	17.2
E-13	1.38	•63	63.9	11.7	16.5
Pima S-5	1.45	•70	65.0	11.3	17.2
E-14	1.37	. 64	62.6	11.6	16.1

Table 125.--Pima test: Seed data for Marana, Ariz. (Clark farm)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-44	23.9	3.31	1.25	3.4	13.0
P-34	24.0	3.23	1.01	2.2	14.0
E-17	24.2	3.56	1.18	1.8	13.0
P-42	23.7	3.35	•98	3.3	13.0
E-15	24.5	3.68	1.17	2.4	13.0
P-43	25.3	3.35	1.10	3.3	12.5
E-16	24.3	3.58	1.20	5.2	13.0
E-13	24.2	3.51	1.17	3.1	13.0
Pima S-5	24.1	3.51	1.01	2.7	13.0
E-14	24.1	3.52	1.14	2.7	13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-44	112.3	122.1	1.064	1.3	11.9
P-34	128.0	133.3	1.036	4.0	13.3
E-17	116.2	125.0	1.062	1.3	12.3
P-42	112.3	122.1	1.032	3.3	11.6
E-15	121.9	129.0	1.048	1.5	12.8
P-43	123.0	129.8	1.046	2.5	12.9
E-16	117.4	125.8	1.073	1.5	12.6
E-13	114.9	124.1	1.070	1.3	12.3
Pima S-5	126.3	132.1	1.040	0.8	13.1
E-14	119.2	127.1	1.082	1.3	12.9

Table 126.--Pima test: Yield, boll, and spinning data for Wenden, Ariz.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
Pima S-5	1115 a	3.58	39.3	12.2	4.35
E-17	1110 a	3.32	38.3	11.7	4.20
E-16	1024 ab	3.32	38.2	11.7	4.15
P-34	1016 ab	2.96	39.9	12.4	4.45
E-14	973 ab	3.25	37.0	12.3	4.50
E-15	956 ab	3.29	38.3	11.9	4.45
P-44	940 ab	3.07	36.8	11.6	4.40
P-43	937 ab	3.40	37.4	13.0	4.55
E-13	890 ab	3.22	38.5	11.7	4.35
P-42	842 b	3.17	39.4	11.7	4.10
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
Pima S-5	1.37	0.67	70.5	11.4	17.9
E-17	1.39	•71	67.1	11.4	17.2
E-16	1.41	•65	68.1	11.3	16.4
P-34	1.41	•71	65.1	12.2	18.6
E-14	1.39	•61	66.5	11.5	16.3
E-15	1.38	•66	67.6	11.3	17.9
P-44	1.39	• 64	69.4	11.2	16.4
P-43	1.35	•66	68.7	11.4	19.0
	2 - 0 0	• • • •	J 0 .	11.	
E-13	1.38	•63	68.1	11.5	17.2

Table 127.--Pima test: Seed data for Wenden, Ariz.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
Pima S-5	22.4	3.70	0.90	2.8	13.0
E-17	23.1	3.60	•88	2.9	13.0
E-16	22.5	3.71	•98	2.1	13.0
P-34	21.1	3.72	• 82	1.8	13.5
E-14	22.4	3.70	1.03	3.0	13.0
E-15	22.2	3.72	•83	1.3	13.0
P-44	21.9	3.79	•87	2.4	13.0
P-43	23.8	3.60	1.00	2.9	12.5
E-13	22.5	3.80	•83	2.6	13.0
P-42	21.6	3.53	•79	2.2	12.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
Pima S-5	117.5	125.8	1.029	4.3	12.1
E-17	107.6	118.7	1.049	3.8	11.3
E-16	109.7	120.2	1.052	2.0	11.5
P-34	120.9	128.3	1.023	5.8	12.4
E-14	113.5	123.0	1.044	2.0	11.8
E-15	115.8	124.7	1.013	4.3	11.7
P-44	107.4	118.6	1.057	2.0	11.3
P-43	120.3	127.9	1.028	3.0	12.4
E-13	111.4	121.5	1.046	2.3	11.6
P-42	109.4	120.0	1.000	8.3	10.9

Table 128.--Pima test: Yield, boll, and spinning data for Marana, Ariz. (Station)

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-44	1107 a	3.19	37.3	10.7	4.50
P-34	1084 a	3.29	40.7	12.2	4.90
E-17	1072 a	3.53	39.0	11.3	4.45
E-14	1061 a	3.39	37.8	11.7	4.65
P-42	1052 a	3.43	38.9	11.5	4.50
P-43	1049 a	3.39	37.4	12.4	4.65
E-15	1043 a	3.46	38.7	10.9	4.40
E-16	1018 a	3.33	38.9	10.8	4.30
E-13	1009 a	3.48	39.7	10.9	4.55
Pima S-5	952 a	3.57	38.4	11.9	4.40
	Span length (inches)		Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
P-44	1.39	0.65	66.3	11.1	17.0
P-34	1.39	•69	64.5	11.9	19.0
E-17	1.39	•65	66.4	11.5	16.3
E-14	1.43	.67	65.7	11.4	16.6
P-42	1.43	•71	66.6	11.7	15.3
	1.44	• 70	66.5	11.2	16.1
P-43					
P-43 E-15		•61	67.1	11.3	17.4
E-15	1.35	•61 •65	67.1 66.3	11.3	17.4 17.5
		.61 .65 .64	67.1 66.3 64.9	11.3 11.1 11.4	17.4 17.5 16.0

Table 129.--Pima test: Seed data for Marana, Ariz. (Station)

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-44	25.4	2.99	1.14	3.4	13.0
P-34	24.9	3.12	• 94	1.7	13.0
E-17	26.1	3.15	1.04	2.9	13.0
E-14	25.7	3.08	1.12	3.5	13.0
P-42	26.0	3.00	• 94	3.4	13.0
P-43	27.4	2.89	•99	4.6	12.5
E-15	25.4	3.08	1.06	3.1	13.0
E-16	25.8	3.05	1.08	3.0	13.0
E-13	25.7	3.02	•91	3.6	13.0
Pima S-5	25.0	3.18	• 96	2.4	13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-44	100.7	113.6	1.064	1.0	10.7
P-34	122.0	128.9	1.026	2.0	12.5
E-17	104.9	116.7	1.053	1.8	10.8
E-14	110.0	120.4	1.051	1.3	11.5
P-42	113.7	123.1	•998	2.5	11.3
P-43	116.0	124.8	1.052	1.8	12.2
E-15	104.3	116.2	1.030	1.8	10.7
E-16	105.9	117.5	1.036	1.8	11.0
E-13	103.9	116.0	1.057	1.8	11.0
Pima S-5	115.3	124.3	1.022	2.3	11.8

Table 130.--Pima test: Yield, boll, and spinning data for Salome, Ariz.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
E-13	1095 a	3.34	38.1	11.7	4.25
E-14	1081 a	3.47	36.7	12.2	4.35
E-15	1070 a	3.33	38.0	11.5	4.10
Pima S-5	1058 a	3.59	38.8	12.5	4.10
E-17	1048 a	3.35	38.0	11.5	4.05
P-43	1030 a	3.49	37.4	12.6	4.35
P-34	1022 a	3.04	39.7	12.5	4.35
E-16	1013 a	3.25	38.2	11.2	3.85
P-44	988 a	3.03	36.5	11.3	4.30
P-42	923 a	3.15	38.5	11.7	4.10
	Span length (inches)		imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
E-13	1.36	0.63	69.0	11.3	17.3
E-14	1.41	•63	66.1	11.6	17.2
E-15	1.37	• 64	69.3	11.6	16.9
Pima S-5	1.35	• 64	70.5	11.6	15.9
E-17	1.37	•65	68.3	11.6	17.3
P-43	1.36	•68	69.5	11.3	18.2
P-34	1.36	•65	66.9	12.2	18.5
E-16	1.39	• 63	68.6	11.7	17.2
P-44	1.33	•61	69.4	11.4	16.9

Table 131.--Pima test: Seed data for Salome, Ariz.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
E-13	22.3 22.2 22.6 23.3 23.6 24.0 22.4 22.8 21.8 22.9	3.65 3.62 3.60 3.62 3.82 3.51 3.71 3.71 3.74 3.51	0.99 1.11 1.07 .94 1.00 .98 .88 1.11 1.01 .88	2.3 2.0 1.6 1.7 1.6 2.0 0.9 3.1 2.2 1.5	13.0 12.5 13.0 12.5 13.0 12.5 13.5 12.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
E-13	111.9 114.6 105.1 119.2 110.9 119.8 121.1 106.1 104.1 108.0	121.8 123.8 116.9 127.1 121.1 127.5 128.5 117.6 116.1 119.1	1.058 1.052 1.056 1.016 1.029 1.046 1.031 1.023 1.077 1.030	2.0 2.0 4.3 4.3 3.0 2.5 3.3 3.8 5.3	11.8 12.1 11.1 12.1 11.4 12.5 12.5 10.9 12.0 11.1

Table 132.--Pima test: Yield, boll, and spinning data for Safford, Ariz. (Curtis farm)

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
E-13	1056 a	3.56	41.2	10.5	4.75
P-44	1051 a	3.23	39.4	10.5	4.75
E-15	1042 a	3.50	41.1	10.4	4.70
E-14	1012 ab	3.49	40.3	10.7	5.00
E-16	984 abc	3.47	40.9	10.6	4.55
E-17	982 abc	3.68	41.5	10.3	4.65
P-34	952 abc	3.41	42.3	11.7	5.00
P-43	888 bcd	3.79	39.5	12.3	5.00
Pima S-5	869 cd	3.77	40.8	11.3	4.65
P-42	789 d	3.42	41.6	11.0	4.70
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	\overline{R}_d	Hunter's b value	tenacity (cN/tex)
E-13	1.31	0.61	63.6	11.8	15.8
	1.33	•61	63.5	11.7	16.2
P-44	1.33 1.32				16.2
P-44 E-15	1.32	•63	65.3	11.5	16.2 16.1
P-44	1.32 1.37	•63 •65	65.3 62.8	11.5 12.1	16.2 16.1 16.2
P-44 E-15 E-14 E-16	1.32 1.37 1.31	•63 •65 •62	65.3 62.8 64.5	11.5 12.1 12.0	16.2 16.1 16.2 16.4
P-44	1.32 1.37 1.31 1.32	•63 •65 •62 •64	65.3 62.8 64.5 65.8	11.5 12.1 12.0 12.0	16.2 16.1 16.2 16.4 15.3
P-44	1.32 1.37 1.31 1.32 1.30	.63 .65 .62 .64	65.3 62.8 64.5 65.8 62.8	11.5 12.1 12.0 12.0 12.1	16.2 16.1 16.2 16.4 15.3
P-44 E-15 E-14 E-16 E-17 P-34 P-43 Pima S-5	1.32 1.37 1.31 1.32	•63 •65 •62 •64	65.3 62.8 64.5 65.8	11.5 12.1 12.0 12.0	16.2 16.1 16.2 16.4 15.3

Table 133.--Pima test: Seed data for Safford, Ariz. (Curtis farm)

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
E-13	24.2 23.4 24.1 23.3 23.3 23.3 23.0 24.8 23.7 28.5	3.48 3.50 3.55 3.47 3.59 3.55 3.52 3.36 3.47 3.32	1.20 1.22 1.13 1.14 1.15 1.07 .91 1.01 1.09	2.2 2.0 2.0 1.4 1.2 0.9 1.3 2.1 1.7	13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
E-13	100.2 100.5 102.0 105.7 101.0 102.5 117.8 114.8 109.5	113.2 114.5 114.5 117.3 113.8 114.9 126.1 124.0 120.1	1.046 1.048 1.012 1.042 1.053 1.035 1.022 1.031 1.006 1.012	2.3 3.8 2.3 0.5 1.8 3.0 2.0 3.3 4.0 2.3	10.5 10.5 10.3 11.0 10.6 10.6 12.0 11.8 13.0

Table 134.--Pima test: Yield, boll, and spinning data for Coolidge, Ariz.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-34	860 a	3.21	39.1	12.6	4.50
E-13	814 a	3.67	37.1	12.3	4.60
P-44	796 a	3.31	35.5	12.0	4.50
P-43	792 a	3.59	35.6	13.0	4.65
E-14	791 a	3.50	35.7	12.5	4.80
E-15	777 a	3.50	36.5	12.0	4.40
E-17	776 a	3.41	36.2	12.2	4.45
Pima S-5	769 a	3.49	37.0	12.3	4.25
E-16	748 ab	3.26	36.4	11.9	4.30
P-42	663 b	3.26	37.4	11.7	4.35
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
P-34	1.40	0.67	67.5	11.7	19.4
E-13	1.44	•69	67.4	11.4	17.7
P-44	1.44	•69	69.1	11.1	16.7
P-43	1.45	• 75	69.6	11.2	19.3
E-14	1.45	•71	64.8	11.0	17.9
E-15	1.41	•66	69.0	11.6	17.5
E-17	1.40	•66	66.7	11.5	19.1
Pima S-5	1.39	•71	69.3	11.4	19.1
E-16	1.46	•69	67.8	11.5	18.9
P-42	1.44	•72	69.8	11.4	19.3

Table 135.--Pima test: Seed data for Coolidge, Ariz.

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-34	21.6 22.9 21.9 24.2 22.6 22.8 22.4 22.1 22.5 21.7	3.81 3.75 3.83 3.63 3.71 3.79 3.93 3.79 3.84 3.58	0.84 1.03 1.08 .89 1.09 1.13 .95 .87 .93	1.8 2.7 3.0 4.3 2.9 3.0 2.9 3.0 2.5 3.7	13.5 12.5 12.5 11.5 12.5 12.0 12.0 12.0 12.5
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-34	116.9 114.3 108.2 119.9 113.5 109.7 106.5 117.2 109.3	125.5 123.6 119.2 127.6 123.0 120.3 117.9 125.7 119.9 118.4	1.054 1.070 1.089 1.062 1.086 1.084 1.090 1.041 1.084 1.049	5.3 2.5 2.8 2.8 0.8 1.8 3.0 6.0 3.5 8.5	12.3 12.2 11.8 12.7 12.3 11.9 11.6 12.2 11.8

Table 136.--Pima test: Yield, boll, and spinning data for Safford, Ariz. (Station)

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-44	801 a	3.57	38.4	11.7	4.65
E-17	653 Ъ	3.59	39.4	12.1	4.40
E-14	652 Ъ	3.66	38.4	12.6	4.85
E-16	626 Ъ	3.53	39.1	12.1	4.35
P-34	612 b	3.48	41.6	13.0	4.95
E-15	607 Ъ	3.56	39.3	12.0	4.45
P-43	606 Ъ	4.02	37.6	13.9	4.85
Pima S-5	578 bc	3.84	39.8	12.2	4.60
E-13	577 bc	3.85	39.2	12.9	4.60
P-42	513 c	3.57	39.7	12.3	4.55
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
P-44	1.43	0.70	66.5	11.1	16.7
E-17	1.36	•66	64.6	11.0	18.2
E-14	1.40	•62	63.9	11.5	17.3
E-16	1.39	• 64	65.3	11.4	18.2
P-34	1.39	•72	64.5	11.9	17.8
E-15	1.38	•66	65.3	11.4	17.7
P-43	1.39	•71	65.5	11.6	17.7
Pima S-5	1.40	•69	67.5	11.6	16.2
E-13	1.37	• 64	64.6	11.3	16.4
P-42	1.46	•72	68.2	11.3	18.4

Table 137.--Pima test: Seed data for Safford, Ariz. (Station)

Variety	Oil (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-44	24.2	3.13	1.34	1.8	13.0
E-17	24.3	3.30	1.14	2.3	13.0
E-14	25.1	3.32	1.41	2.1	13.0
E-16	24.3	3.28	1.25	1.8	13.0
P-34	23.3	3.36	1.06	1.0	13.0
E-15	24.3	3.31	1.21	1.2	13.0
P-43	25.1	3.30	1.11	2.7	13.0
Pima S-5	24.6	3.19	1.03	1.7	13.0
E-13	23.9	3.33	1.16	1.6	13.0
P-42	23.4	3.27	• 95	2.3	13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-44	114.1	123.5	1.031	2.3	11.8
E-17	116.8	125.4	1.030	1.0	12.0
E-14	118.4	126.6	1.033	1.3	12.2
E-16	114.9	124.0	1.039	3.8	11.9
P-34	128.6	133.7	1.011	2.3	13.0
E-15	115.2	124.2	1.041	2.0	12.0
P-43	129.1	134.1	1.025	3.0	13.2
Pima S-5	122.2	129.2	1.018	3.0	12.4
E-13	122.3	129.3	1.034	1.3	12.6
P-42	122.1	129.2	1.012	3.5	12.4

Table 138.--Pima test: Yield, boll, and spinning data for El Paso, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-44	732 a	3.27	38.7	11.6	4.30
E-15	706 a	3.27	40.4	11.6	4.15
E-17	689 ab	3.37	39.5	11.7	4.25
E-16	675 ab	3.38	40.3	11.6	4.15
E-14	674 ab	3.54	39.9	11.5	4.50
P-34	635 bc	3.30	43.1	12.4	4.85
Pima S-5	584 cd	3.60	40.6	12.1	4.25
P-43	580 cd	3.43	39.1	13.6	4.75
E-13	568 d	3.56	39.7	12.7	4.40
P-42	550 d	3.66	41.2	11.8	4.25
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
P-44	1.37	0 - 64	67.9	11.3	17.4
	1.37	0.64	67 . 9	11.3	17.4 17.0
E-15	1.35	• 63	65.4	11.5	17.0
E-15 E-17	1.35 1.35	• 63 • 62	65.4 65.0	11.5 11.7	17.0 16.6
E-15	1.35 1.35 1.41	• 63 • 62 • 63	65.4 65.0 64.5	11.5 11.7 11.5	17.0 16.6 16.8
E-15	1.35 1.35 1.41 1.38	63626363	65.4 65.0 64.5 63.8	11.5 11.7 11.5 11.7	17.0 16.6 16.8 15.9
E-15	1.35 1.35 1.41 1.38 1.34	6362636366	65.4 65.0 64.5 63.8 64.5	11.5 11.7 11.5 11.7 11.8	17.0 16.6 16.8 15.9 18.3
E-15	1.35 1.35 1.41 1.38 1.34 1.39	636263636663	65.4 65.0 64.5 63.8 64.5 67.9	11.5 11.7 11.5 11.7 11.8 11.1	17.0 16.6 16.8 15.9 18.3 17.6
E-14	1.35 1.35 1.41 1.38 1.34	6362636366	65.4 65.0 64.5 63.8 64.5	11.5 11.7 11.5 11.7 11.8	17.0 16.6 16.8 15.9 18.3

Table 139.--Pima test: Seed data for El Paso, Tex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-44 E-15 E-17 E-16 E-14 P-34 Pima S-5 P-43 E-13 P-42	24.0 24.5 23.7 24.2 24.0 23.3 24.3 24.4 24.5 23.4	3.07 3.24 3.30 3.22 3.08 2.97 3.13 3.27 3.19 3.11	1.10 .95 1.02 1.01 1.00 .81 .96 .90 1.06	3.0 2.1 2.2 2.2 2.6 1.7 3.2 3.5 2.8 3.3	13.0 14.0 13.5 13.5 13.0 14.0 13.0 12.0 13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-44	104.5 112.9 113.1 112.2 118.0 125.0 115.0 128.8 121.7 118.1	116.6 122.6 122.7 122.1 126.2 131.2 124.1 133.8 128.9 126.3	1.048 1.026 1.033 1.050 1.030 1.016 1.001 1.038 1.027 1.012	1.0 3.5 1.3 3.5 0.5 3.5 1.0 2.0 3.0	11.0 11.6 11.7 11.8 12.2 12.7 11.5 13.4 12.5

Table 140.--Pima test: Yield, boll, and spinning data for Safford, Ariz. (Layton farm)

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
E-15	706 a	2.54	38.2	12.2	4.40
P-44	705 a	3.75	37.2	12.1	4.65
E-13	698 a	3.98	38.0	12.7	4.60
E-17	642 a	3.91	37.8	12.3	4.40
E-16	642 a	3.80	37.5	12.5	4.30
P-34	624 a	3.42	40.6	13.0	4.85
E-14	611 a	3.95	37.2	12.8	4.55
P-43	525 b	3.87	37.8	13.4	4.85
Pima S-5	447 bc	3.99	38.8	12.8	4.45
P-42	395 с	3.58	39.3	12.3	4.45
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	$\overline{R_d}$	Hunter's b value	tenacity (cN/tex)
E-15	1.35	0.65	67.4	11.5	17.0
P-44	1.36	•65	69.1	10.9	17.5
E-13	1.35	•62	66.7	11.5	16.6
E-17	1.36	•65	67.4	11.4	18.5
E-16	1.38	• 64	66.3	11.6	17.1
P-34	1.35	•69	65.4	11.8	17.5
E-14	1.37	•63	65.8	11.7	17.3
2–43	1.40	•73	68.1	11.2	19.1
		•71	69.3	11.6	16.6
Pima S-5	1.42		ny. i		

Table 141.--Pima test: Seed data for Safford, Ariz. (Layton farm)

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
E-15	23.3	3.62	1.18	2.8	12.5
P-44	22.4	3.60	1.27	4.3	13.0
E-13	23.7	3.63	1.19	3.7	13.0
E-17	22.6	3.69	1.07	3.0	12.5
E-16	23.1	3.67	1.14	3.4	13.0
P-34	21.4	3.61	•83	3.1	14.0
E-14	23.0	3.58	1.79	3.5	13.0
P-43	24.1	3.48	• 93	4.4	12.5
Pima S-5	22.7	3.58	• 90	3.1	12.5
P-42	21.8	3.49	•83	3.8	13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
E-15	117.2	125.6	1.035	0.8	12.1
P-44	114.4	123.6	1.044	1.0	11.9
E-13	119.1	127.0	1.023	2.8	12.2
E-17	122.1	129.2	1.019	2.0	12.4
E-16	121.6	128.8	1.031	1.3	12.5
P-34	127.6	133.0	•985	3.8	12.6
E-14	121.9	129.0	1.030	1.5	12.5
P-43	128.8	133.8	1.010	2.0	13.0
Pima S-5	125.2	131.3	•996	2.8	12.5
P-42	116.1	124.9	•985	8.0	11.4

Table 142.--Pima test: Yield, boll, and spinning data for Las Cruces, N. Mex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
E-15	704 a	3.66	36.6	12.7	4.60
E-14	696 a	3.69	36.3	12.7	4.70
P-44	696 a	3.43	35.8	12.4	4.70
P-34	686 ab	3.41	40.7	12.6	4.90
E-17	663 ab	3.62	36.9	12.2	4.85
P-43	643 abc	3.77	36.6	14.0	4.65
E-16	624 abc	3.54	36.7	12.1	4.85
E-13	604 abc	3.66	36.5	13.2	4.70
P-42	569 bc	3.40	38.9	12.0	4.65
Pima S-5	542 c	3.55	37.8	12.7	4.65
	Span length (inches)		Colorimeter		Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
E-15	1.43	0.66	68.2	11.5	17.6
E-14	1.43	•68	65.7	12.1	16.6
P-44	1.39	•66	66.5	11.1	16.8
P-34	1.32	•65	61.9	12.2	17.6
E-17	1.40	•68	66.9	11.9	17.0
P-43	1.40	•65	65.7	11.3	17.3
E-16	1.40	•69	66.7	11.6	17.9
E-13	1.42	•67	66.6	11.7	16.7
P-42	1.41	•66	65.6	11.7	16.8
Pima S-5	1.38	.65	63.1	11.6	16.4

Table 143.--Pima test: Seed data for Las Cruces, N. Mex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
E-15	22.8	3.64	0.98	3.5	13.0
E-14	23.2	3.58	1.07	3.1	12.5
P-44	22.4	3.57	1.05	3.7	12.0
P-34	22.0	3.47	•71	2.3	14.0
E-17	22.7	3.71	• 97	3.2	13.0
P-43	23.2	3.53	•88	3.0	12.0
E-16	22.5	3.63	•90	3.5	12.5
E-13	22.3	3.59	•95	3.4	12.5
P-42	21.6	3.37	•81	3.5	13.0
Pima S-5	22.2	3.59	•79	2.4	13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
E-15	117.5	125.9	1.036	1.5	12.2
E-14	120.4	128.0	1.030	2.8	12.4
P-44	118.3	126.5	1.054	2.3	12.5
P-34	121.6	128.8	1.028	2.5	12.5
E-17	113.4	122.9	1.029	3.0	11.7
P-43	137.1	139.5	1.023	1.8	14.0
E-16	112.8	122.5	1.037	3.0	11.7
E-13	125.3	131.4	1.036	1.8	13.0
P-42	115.7	124.6	1.007	8.0	11.7
Pima S-5	124.9	131.1	1.011	5.5	12.6

Table 144.--Pima test: Yield, boll, and spinning data for Fabens, Tex.

Variety	Lint yield (1b/acre)	Boll size (g/boll)	Lint percent	Seed index	Micronaire reading
P-44	550 a	3.10	37.8	11.8	4.70
E-17	525 ab	3.12	39.1	11.9	4.35
E-16	524 ab	3.26	38.9	12.2	4.30
E-14	502 ab	3.18	38.2	12.4	4.55
P-34	490 abc	3.27	41.9	13.0	5.00
Pima S-5	485 abc	3.31	40.2	11.9	4.50
E-15	482 abc	3.10	38.1	11.9	4.35
E-13	457 abc	3.20	39.0	12.2	4.50
P-43	415 bc	3.27	37.6	13.7	4.95
P-42	383 c	2.96	40.4	12.0	4.45
	Span length (inches)	Color	imeter	Yarn
	2.5%	50%	R_d	Hunter's b value	tenacity (cN/tex)
P-44	1.36	0.63	67.0	10.9	16.8
E-17	1.37	• 66	66.7	11.3	18.2
E-16	1.42	•68	66.7	11.4	18.2
E-14	1.42	•68	65.0	11.8	16.8
P-34	1.34	• 64	62.9	11.8	17.9
Pima S-5	1.32	•60	67.2	11.4	16.6
E-15	1.38	•68	66.0	11.4	17.7
E-13	1.34	• 64	65.9	11.6	16.7
P-43	1.40	•72	66.1	10.8	18.6
I-40 ***********					

Table 145.--Pima test: Seed data for Fabens, Tex.

Variety	0il (percent)	Nitrogen (percent)	Free gossypol (percent)	Linters (percent)	Seed grade
P-44	22.2	3.56	0.99	3.2	13.0
E-17	22.6	3.58	• 95	2.5	13.0
E-16	22.5	3.64	1.18	3.1	13.0
E-14	23.2	3.39	1.10	4.3	12.0
P-34	22.7	3.64	•83	1.4	14.0
Pima S-5	23.6	3.44	•81	2.9	14.0
E-15	22.4	3.55	1.06	3.3	13.0
E-13	22.3	3.50	•86	3.5	12.0
P-43	23.9	3.63	•82	3.1	13.0
P-42	22.8	3.34	•69	3.1	13.0
	Seed volume (mm ³)	Seed surface area (mm ²)	Seed density (g/cm ³)	Floaters (percent)	Acid- delinted- seed index
P-44	109.9	120.4	1.057	4.0	11.6
E-17	113.6	123.1	1.045	2.0	11.9
E-16	112.4	122.2	1.059	2.8	11.9
E-14	116.0	124.8	1.052	1.8	12.2
P-34	126.8	132.4	1.027	2.0	13.0
Pima S-5	114.7	123.9	1.027	2.5	11.8
E-15	114.3	123.6	1.063	1.5	12.1
E-13	115.6	124.5	1.047	1.3	12.1
P-43	130.5	135.0	1.045	1.8	13.6
P-42	116.1	124.9	1.015	5.3	11.8

Table 146.--Combed-yarn test: Phoenix, Ariz.

COMBED-YARN TEST

	Variety					
Test*	Pima S-5	P-34	P-42	P-43	P-44	
Classer's designation:						
Grade	5	6	6	5	6	
Staple: 32's inch	46	46	46	46	46	
Yarn tenacity, cN/tex: 11.8 tex, combed	16.4	17.9	17.2	16.9	16.9	
7.4 tex. combed	13.9	15.4	14.6	14.2	14.6	
Yarn appearance index	130	130	120	125	120	
Yarn imperfections:						
11.8 tex, combed	244	98	72	62	66	
7.4 tex, combed	434	154	146	198	168	
Waste, percent: Picker and card	9.8	11.3	11.6	10.4	12.0	
Comber	15.1	13.5	13.0	15.5	16.6	
	E-13	E-14	E-15	E-16	E-17	
Classer's designation:						
Grade	6	6	6	6	6	
Staple: 32's inch	46	46	46	46	46	
Yarn tenacity, cN/tex:						
11.8 tex, combed	16.9	16.7	18.3	18.6	17.2	
7.4 tex, combed	14.6	14.2	15.4	15.8	15.0	
Yarn appearance index Yarn imperfections:	110	110	115	105	115	
11.8 tex, combed	96	96	86	152	74	
7.4 tex, combed	462	264	200	322	214	
Waste, percent:						
Picker and card	11.8	11.8	11.6	12.2	11.8	
Comber	15.6	16.1	15.6	16.1	15.9	

^{*&}quot;Yarn imperfections" are greater than in previous test years because of a change in measurement. Previously reported as the number of imperfections per 50 metres, the imperfections here are per 1,000 yards.

Table 147.--Combed-yarn test: Safford, Ariz.

	Variety					
Test*	Pima S-5	P-34	P-42	P-43	P-44	
Classer's designation:						
Grade	6	5	6	5	6	
Staple: 32's inch	44	44	46	44	46	
Yarn tenacity, cN/tex: 11.8 tex, combed	16.2	16.4	16.7	15.7	16.4	
7.4 tex, combed	13.5	13.9	13.9	13.1	14.2	
Yarn appearance index	125	130	120	125	120	
Yarn imperfections:						
11.8 tex, combed	42	30	52	10	54	
7.4 tex, combed	126	70	108	90	92	
Waste, percent:						
Picker and card	9.4	10.6	10.7	9.0	12.5	
Comber	11.9	12.0	12.1	12.5	12.5	
	E-13	E-14	E-15	E-16	E-17	
Classer's designation:						
Grade	6	5	6	6	5	
Staple: 32's inch	46	46	44	46	46	
Yarn tenacity, cN/tex: 11.8 tex, combed	16.0	16.0	17.4	17.6	17.4	
7.4 tex, combed	13.5	13.5	14.6	15.0	15.0	
Yarn appearance index	125	120	120	115	130	
Yarn imperfections:						
11.8 tex, combed	26	72	54	64	34	
7.4 tex, combed	82	122	138	126	102	
Waste, percent:	40.1	0.0	11 0	1.1 1	10.0	
Picker and card	12.4	9.8 13.2	11.0 13.8	11.4 12.8	13.3	
Comber	13.5	13.4	13.0	12.0	13.3	

^{*&}quot;Yarn imperfections" are greater than in previous test years because of a change in measurement. Previously reported as the number of imperfections per 50 metres, the imperfections here are per 1,000 yards.

Table 148.--Combed-yarn test: El Paso, Tex.

	Variety					
Test*	Pima S-5	P-34	P-42	P=43	P-44	
Classer's designation:						
Grade	6	6	6	5	6	
Staple: 32's inch Yarn tenacity, cN/tex:	46	44	46	44	44	
11.8 tex, combed	15.5	15.3	15.5	15.0	15.5	
7.4 tex, combed	12.8	12.8	13.1	12.4	13.1	
Yarn appearance index	130	130	120	130	125	
Yarn imperfections:	116	2 li	22	20	20	
11.8 tex, combed 7.4 tex, combed	46 142	34 70	32 118	20 108	30 98	
Waste, percent:	142	10	110	100	90	
Picker and card	10.0	13.2	13.8	11.4	14.4	
Comber	13.3	14.3	13.8	14.8	15.7	
	E-13	E-14	E-15	E-16	E-17	
Classer's designation:						
Grade	6	6	6	6	6	
Staple: 32's inch Yarn tenacity, cN/tex:	44	44	44	46	44	
11.8 tex, combed	15.0	14.6	16.4	16.9	16.0	
7.4 tex, combed	12.8	12.4	13.5	14.2	13.5	
Yarn appearance index	130	125	125	120	125	
Yarn imperfections: 11.8 tex, combed	18	88	52	24	30	
7.4 tex, combed	74	104	154	118	118	
Waste, percent:		101	, , ,	710		
Picker and card	13.8	14.2	13.1	13.8	13.1	
Comber	14.6	14.6	14.5	15.1	17.1	

^{*&}quot;Yarn imperfections" are greater than in previous test years because of a change in measurement. Previously reported as the number of imperfections per 50 metres, the imperfections here are per 1,000 yards.

ACKNOWLEDGMENTS

The success of the National Cotton Variety Testing Program results from the interest and diligence of many workers who conducted the tests, processed the fiber samples, tabulated the information, and analyzed the data. The following were primarily responsible for furnishing field data and providing samples:

Alabama--W. C. Johnson.
Arizona--C. V. Feaster, E. L. Turcotte.
Arkansas--C. W. Smith, B. A. Waddle.
California--D. M. Bassett.
Georgia--Shelby Baker, J. B. Weaver, Jr.
Louisiana--D. J. Bouquet, W. D. Caldwell, M. M. Graham, L. E. Mokry.
Mississippi--R. R. Bridge, J. F. Chism, W. R. Meredith, Jr.
Missouri--W. P. Sappenfield.
New Mexico--C. E. Barnes, N. R. Malm.
North Carolina--B. Brown, J. A. Lee.
Oklahoma--E. S. Oswalt, L. M. Verhalen.
South Carolina--T. W. Culp, J. B. Pitner, D. E. Purvis.
Tennessee--P. E. Hoskinson.
Texas--L. E. Clark, R. A. Creelman, J. R. Gannaway, G. A. Niles, D. F. Owen,
L. Ray, L. Reyes, N. Vestal, E. F. Young.

The interest and cooperation of the commercial cottonseed firms of the United States are acknowledged. For the most part, seed for the regional varieties were contributed by commercial firms. Seed of varieties used as national standards were supplied by the following organizations: Acala SJ-5--California Planting Cotton Seed Distributors, Bakersfield, Calif.; Coker 310--Coker's Pedigreed Seed Company, Hartsville, S.C.; Paymaster 303--ACCO Seeds, Plainview, Tex.; and Stoneville 213--Stoneville Pedigreed Seed Company, Stoneville, Miss.

JOINT COTTON BREEDING POLICY COMMITTEE (As of January 1980)

- T. E. Corley, Alabama Agricultural Experiment Station, Auburn, Ala.
- E. C. Ewing, Jr., Delta and Pine Land Co., Scott, Miss.
- H. O. Graumann, U.S. Department of Agriculture, Washington, D.C.
- D. C. Hess, ACCO Seeds, Plainview, Tex.
- P. A. Miller, U.S. Department of Agriculture, Beltsville, Md.
- W. K. Porter, Jr., Mississippi Agricultural and Forestry Experiment Station, Mississippi State, Miss.
- J. R. Smith, National Cotton Council of America, Memphis, Tenn.
- L. O. Warren, Arkansas Agricultural Experiment Station, Fayetteville, Ark.
- H. W. Webb, Coker's Pedigreed Seed Co., Hartsville, S.C.

NATIONAL COTTON VARIETY TESTING COMMITTEE (As of January 1980)

- D. M. Bassett, U.S. Cotton Field Station, Shafter, Calif.
- R. R. Bridge, Delta Branch Experiment Station, Stoneville, Miss.
- H. B. Cooper, Jr., California Planting Cotton Seed Distributors, Shafter, Calif.
- E. C. Ewing, Jr., Delta and Pine Land Co., Scott, Miss. (secretary)
- C. V. Feaster, U.S. Department of Agriculture, Cotton Research Center, Phoenix, Ariz.
- J. R. Gannaway, Texas Agricultural Experiment Station, El Paso, Tex.
- D. C. Hess, ACCO Seeds, Plainview, Tex.
- P. E. Hoskinson, West Tennessee Agricultural Experiment Station, Jackson, Tenn.
- C. F. Lewis, U.S. Department of Agriculture, Beltsville, Md.
- C. W. Manning, Stoneville Pedigreed Seed Co., Stoneville, Miss.
- D. Markarian, San Joaquin Valley Continuous Cotton Variety Testing Committee, Bakersfield, Calif.
- P. A. Miller, U.S. Department of Agriculture, Beltsville, Md.
- G. A. Niles, Texas Agricultural Experiment Station, College Station, Tex. (chairman)
- H. H. Ramey, Jr., U.S. Department of Agriculture, Knoxville, Tenn.
- L. L. Ray, Texas Agricultural Experiment Station, Lubbock, Tex.
- W. P. Sappenfield, University of Missouri, Delta Center, Portageville, Mo.
- H. W. Webb, Coker's Pedigreed Seed Co., Hartsville, S.C.



U. S. DEPARTMENT OF AGRICULTURE
SCIENCE AND EDUCATION ADMINISTRATION
P. O. BOX 53326
NEW ORLEANS, LOUISIANA 70153
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
U. S. DEPARTMENT OF
AGRICULTURE
AGR 101



FIRST CLASS

Return the mailing label(s) to above address if:

- ☐ Your name or address is wrong (indicate corrections, including ZIP).
- ☐ You receive duplicate copies (include labels from all copies received).
- \square You do NOT wish to continue receiving this technical series.